

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of:)	
)	MM Docket No. 99-25
Creation of a)	
Low Power Radio Service)	
)	

To: THE COMMISSION

COMMENTS OF THE NEW JERSEY BROADCASTERS ASSOCIATION

The New Jersey Broadcasters Association, a non-profit association representing substantially all of the radio and television broadcast stations in the State of New Jersey, hereby submits its comments to the *Second Order on Reconsideration and Further Notice of Proposed Rulemaking* in MM Docket No. 99-25.

On May 27, 2004, the New Jersey Broadcasters Association submitted to the FCC a Petition for Rule Making seeking to protect New Jersey radio listeners from FM translator and LPFM interference. In that Petition for Rule Making, the New Jersey Broadcasters Association asked the FCC to protect the New Jersey radio listening audience from losing reception to the comparatively few stations allotted to New Jersey by adopting the following amendments to the Commission's rules: (1) amend the rules to require FM translator and Low Power FM 100 watt ("LPFM") stations applying to operate in New Jersey provide protection to the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities licensed to New Jersey communities (with maximum

permitted facilities assumed for each station), (2) adopt the use of a 20 dB desired to undesired (“D/U”) ratio for the second adjacent channel, (3) prohibit the grant of future licenses to translator stations in New Jersey with effective radiated power of less than 100 watts, and (4) prohibit the grant of LP10 licenses to any community in New Jersey.

A copy of the May 27, 2004 Petition for Rulemaking is attached. The New Jersey Broadcasters Association asks that its proposals be considered in this proceeding.

Respectfully Submitted,

NEW JERSEY BROADCASTERS ASSOCIATION

/s/ John F. Garziglia

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May 27, 2004

RECEIVED

MAY 27 2004

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

**Re: Petition to Protect New Jersey Listeners
From FM Translator and LPFM Interference**

Dear Ms. Dortch:

On behalf of New Jersey Broadcasters Association, enclosed for filing are an original and four copies of a Petition for Rulemaking seeking amendments to Sections 73.807 and 74.1204(a) of the Commission's rules. Five additional bound copies of the Petition are enclosed for delivery to the Commissioners. Please acknowledge receipt of this filing by providing a date-stamped copy of this letter.

Any questions regarding this filing should be directed to this office.

Respectfully submitted,


John F. Garziglia

cc: Mr. Robert E. McAllan
Mr. Philip H. Roberts

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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MAY 27 2004

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
) RM-_____
Amendment of Sections 74.1204(a))
And 73.807 of the Commission's Rules)
)

PETITION FOR RULEMAKING

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Executive Summary

In this Petition for Rulemaking, New Jersey Broadcasters Association (“NJBA”), proposes amendments to Sections 73.807 and 74.1204(a) of the Commission’s rules to remedy a severely inequitable allotment of full power commercial FM stations to the state of New Jersey.

Section 307(b) of the Communications Act requires the Commission to distribute “licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.” The Petition examines comparative data from neighboring states to conclude that commercial FM licenses have been unfairly, inefficiently, and inequitably distributed to New Jersey. Large population centers of the state do not have even one local FM station. Eighteen of the 46 commercial band stations allocated to the state have transmitter sites in the Atlantic/Cape May region — the least populous area of the state. The remaining 28 stations cover a population of about 7.5 million, far out of line with allocations in neighboring states.

Many New Jersey stations are underpowered Class A stations or disadvantaged Class B stations. More than one-half of New Jersey stations cover only two-thirds or less of the area they would have covered had they been built as maximum facilities at the center — rather than the periphery — of populated areas. Eleven of these stations cover only one-third or less of what they would achieve as maximum class stations.

The Petition traces the history of Commission policies that have brought the New Jersey FM broadcast environment to this critical juncture. Among other things, the allotment of a disproportionate number of higher power stations to neighboring New York and Pennsylvania left the New Jersey landscaped dominated by underpowered Class A stations that are inadequately protected from interference. Many New Jersey Class B stations are severely short-

spaced or pushed to the Atlantic Ocean by their higher powered counterparts in neighboring states.

NJBA proposes the prohibition of LP10 stations and translators in New Jersey with effective radiated power of less than 100 watts, because they do not contribute to spectrum efficiency. An LP10 station operating at maximum facilities has a service area of 12.36 square miles, with an interference contour ranging from 126.26 square miles with respect to Class A stations, to 244.69 square miles with respect to Class B stations. In other words, for a service area of a mere 12.36 square miles, an LP10 carves out an area of interference that is almost 2000% larger with respect to Class B stations. In New Jersey, this would result in cannibalization of the already limited existing FM service.

In assessing the need to protect New Jersey stations from additional interference, the Commission should take into account that the FM listening audience no longer consists of static listeners, sitting at home, receiving signals from a fixed antenna. A mobile audience will not tolerate fluctuating signals as they drive into squalls of interference. Increased interference will result in the abandonment of FM by its audience, in favor of clear reception from satellite, CDs and MP3s.

Despite technical infirmities, New Jersey stations reach audiences far beyond their predicted coverage contours. The influx of hundreds of applications for LPFM and translator stations, however, will introduce intolerable levels of interference. The Petition presents an engineering study with sample maps demonstrating how severely the interference invasion will encroach on New Jersey FM stations. In view of the paucity of FM stations in New Jersey, the added interference will strip FM stations from the dials of the New Jersey audience, without substituted coverage.

NJBA proposes the Commission amend the rules to require FM translator and LP100 watt stations applying to operate in New Jersey to provide protection to the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities licensed to New Jersey communities (with maximum permitted facilities assumed for each station), with a 20 dB desired to undesired (“D/U”) ratio for the second adjacent channel. There is considerable support for adoption of this standard. The most compelling data are from actual listenership reports that demonstrate audience well *beyond* the 44 dBu contour. These reports are supplemented and confirmed by laboratory studies.

In order to protect the New Jersey listening audience from losing reception to the comparatively few stations allotted to New Jersey, NJBA proposes the following amendments to the Commission’s rules: (1) amend the rules to require FM translator and Low Power FM 100 watt (“LPFM”) stations applying to operate in New Jersey to provide protection to the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities licensed to New Jersey communities (with maximum permitted facilities assumed for each station), (2) adopt the use of the 20 dB desired to undesired (“D/U”) ratio for the second adjacent channel, (3) prohibit the grant of future licenses to translator stations in New Jersey with effective radiated power of less than 100 watts, and (4) prohibit the grant of LP10 licenses to any community in New Jersey.

On April 15, 2004, the Commission issued a *Further Notice of Proposed Rule Making* seeking comment on what rule changes and amendments are necessary due to the advent of digital audio broadcasting (“DAB”). Among other things, the Commission will revisit Section 73.313 of the Commission’s rules to determine whether predictions of field coverage should

continue to be made without regard to interference. The grant of new LPFM and translator applications would be tantamount to a premature decision on the future of DAB in New Jersey.

New Jersey FM broadcasting is at a crossroads. The Commission must end the trend of years of inattention and neglect by curtailing a flood of new translator and LPFM stations that would result in the eventual demise of local New Jersey FM stations. NJBA requests an immediate freeze on the acceptance for filing and grant of any further applications for construction permits or licenses for LPFM or translator stations in the state of New Jersey pending the outcome of this rulemaking proceeding and the DAB enquiry.

TABLE OF CONTENTS

INTRODUCTION.....	2
I. STATIONS IN NEW JERSEY ARE NOT EQUITABLY DISTRIBUTED IN ACCORDANCE WITH SECTION 307(B) OF THE COMMUNICATIONS ACT.....	3
A. NEW JERSEY IS DISPROPORTIONATELY DEPENDENT UPON SERVICE FROM DISADVANTAGED CLASS B AND UNDERPOWERED CLASS A STATIONS.....	3
B. FM STATIONS HAVE NOT BEEN FAIRLY ALLOCATED TO THE STATE OF NEW JERSEY	8
II. COMMISSION POLICIES HAVE HISTORICALLY UNDERMINED RADIO BROADCASTING IN NEW JERSEY.....	13
III. AN INFLUX OF LPFM AND TRANSLATOR STATIONS WILL EXACERBATE THE NEW JERSEY ANOMALY	20
A. FM TRANSLATOR AND LPFM STATIONS WILL OPERATE AT THE EXPENSE OF NEW JERSEY LISTENERS	21
B. LPFM AND TRANSLATOR STATIONS DO NOT CONTRIBUTE TO SPECTRUM EFFICIENCY ...	24
C. THE COMMISSION SHOULD FREEZE NEW JERSEY LPFM AND TRANSLATOR APPLICATIONS WHILE IT EXPLORES HOW TO PROCEED WITH DIGITAL AUDIO BROADCASTING	28
IV. NEW JERSEY'S PROPOSAL WILL FOSTER IMPORTANT COMMISSION POLICIES	29
A. THE PUBLIC INTEREST IS BETTER SERVED BY THE PRESERVATION OF THE INTEGRITY OF THE FM BROADCASTING SERVICE IN NEW JERSEY	29
B. PROTECTION TO THE 44 DBU CONTOUR IS NECESSARY TO PROTECT NEW JERSEY STATIONS FROM HARMFUL INTERFERENCE	31
CONCLUSION	41

EXHIBITS

Exhibit 1.....	Distribution of FM Stations by State
Exhibit 2.....	Map of Stations with Transmitter Sites in Atlantic/Cape May Counties and Detail
Exhibit 3.....	New Jersey Commercial FM Station Coverage Areas as a Percentage of Maximum Class Facilities
Exhibit 4.....	Proposed Low Power FM Spacings
Exhibit 5.....	Proposed FM Translator Interference Contours and Full Power FM Protected Contours
Exhibit 6.....	Interference Effect of Low Power FM Stations
Exhibit 7.....	WKXW Listening Location Performance
Exhibit 8.....	Arbitron Listenership Study: WDHA-FM
Exhibit 9.....	Arbitron Listenership Study: WHTG-FM
Exhibit 10.....	Arbitron Listenership Study: WKXW-FM
Exhibit 11.....	FM Stereo Receiver Performance with Low Signal Levels Co-channel and Second Adjacent Channel Interference

- Exhibit 12.....Technical Report Summarizing Analysis of Interference and 10 Accompanying
Maps
- Exhibit 13.....Maps Depicting Interference from Multiple Translators: WDHA-FM,
WHTG-FM, WKXW-FM

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Amendment of Sections 74.1204(a))
And 73.807 of the Commission's Rules)
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To: The Commission

PETITION FOR RULEMAKING

New Jersey Broadcasters Association (“NJBA”), by counsel, hereby submits its Petition for Rulemaking seeking an amendment to Sections 73.807 and 74.1204(a) of the Commission’s rules. Historical Commission policies have disadvantaged the citizens and commercial broadcasters of New Jersey — contrary to the requirements of Section 307(b) of the Communications Act. To prevent further deterioration to the New Jersey FM band broadcast environment, NJBA proposes that the Commission (1) amend the rules to require FM translator and Low Power FM 100 watt (“LPFM”) stations applying to operate in New Jersey to provide protection to the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities licensed to New Jersey communities (with maximum permitted facilities assumed for each station pursuant to 73.211(b)(3) of the Commission’s rules), (2) adopt the use of the 20 dB desired to undesired (“D/U”) ratio for the second adjacent channel, (3) prohibit the grant of future licenses to translator stations in New Jersey with effective radiated power of less than 100 watts (hereinafter referred to as “LP Translators”), and (4) prohibit the grant of LP10 licenses to any community in New Jersey. NJBA requests an immediate freeze on the acceptance for filing and grant of any further applications for construction permits or licenses for

LPFM or translator stations in the state of New Jersey pending the outcome of this rulemaking proceeding.¹

INTRODUCTION

1. Good cause exists for the initiation of this proposed proceeding. Implementation of the proposal will remedy historical Commission policies that have relegated most of New Jersey's FM broadcasters to second-class status, with underpowered facilities and inadequate interference protection. NJBA appreciates that delineating a protected contour involves the balancing of competing interests. The objective of increasing the number of stations and translators can be achieved by limiting the protected contour. Alternatively, the objective of expanding service area is satisfied by increasing the protected contour and minimizing interference. Since the solution of increasing power for New Jersey stations is not currently feasible, the Commission must act to minimize interference to New Jersey FM stations. Unless interference is minimized, many in the New Jersey FM listening audience will lose service from stations upon which they currently rely. For most, this service will not be replaced by service from translators and LPFM stations. Instead, it will be permanently lost to interference. NJBA's proposal will ensure that the goals of Section 307(b) of the Communications Act are met while at the same time providing for enhanced and expanded service and spectrum efficiency. The public interest will be well served by adoption of this proposal. The following is shown in support thereof:

¹ As discussed below in paragraphs 57 *et seq.*, deference to the outcome of the Commission's recently initiated enquiry into what rule changes and amendments are necessary due to the advent of digital audio broadcasting forms an independent basis for a freeze on the acceptance for filing and grant of further applications for construction permits or licenses for LPFM or translator stations in New Jersey.

I. STATIONS IN NEW JERSEY ARE NOT EQUITABLY DISTRIBUTED IN ACCORDANCE WITH SECTION 307(b) OF THE COMMUNICATIONS ACT

2. Section 307(b) of the Communications Act requires that the Commission distribute “licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.”² A review of the current situation reveals that FM broadcast stations were unfairly, inefficiently and inequitably distributed to the state of New Jersey. For reference, we will refer to this condition in the rest of this petition as the “New Jersey Anomaly.”³

A. New Jersey is Disproportionately Dependent Upon Service From Disadvantaged Class B and Underpowered Class A Stations

3. New Jersey is a study in contrast. On the one hand, the state is a small one — 46th in land area, comprised of 7,790 square miles.⁴ On the other, the state is heavily populated, with approximately 8.2 million people, making it the most densely populated state in the nation.⁵

² The Commission adopted its FM table so as “to allow the Commission to meet its obligation under Section 307(b) of the Communications Act to provide a ‘fair, efficient and equitable distribution of radio service’ to the various states and the communities within them.” *Revision of FM Assignment Policies and Procedures, Second Report & Order*, 90 FCC 2d 88, para. 3 (1982).

³ It will become clear in the course of this Petition that “Anomaly” is the most benign characterization that can be applied to the condition of New Jersey FM broadcasting. Whether described as an anomaly, a crisis, or in more colorful terms, the condition of New Jersey broadcasting speaks for itself. NJBA has spurned more descriptive language because it does not believe the grave situation facing the New Jersey FM listening audience was deliberately imposed by the Commission. Nonetheless, after years of inattention and neglect, appropriate action must be taken to prevent New Jersey FM stations from being swamped by interference.

⁴ *Smart Growth: A Tale of Two States New Jersey & Maryland*, Martin A. Bierbaum, Ph.D., J.D. New Jersey Department of Community Affairs, May, 2001.

⁵ *Id.* See also New Jersey State Data Center 2000 Census Publication, New Jersey Population Trends 1790-2000, August 2001 (available at <http://www.wnjp.in.net/OneStopCareerCenter/LaborMarketInformation/lmi25/pub/NJSDC-P3.pdf>) (1,134.4 population per sq. mile as compared to 330.3 for the northeast in general and 79.6 for the United States as a whole).

New Jersey is dominated by two major out-of-state radio markets — New York to the north and Philadelphia to the west (the number 1 and 4 markets, respectively) — both of which are centered outside of its borders and “whose markets nearly touch somewhere in Central Jersey.”⁶

4. New Jersey is comprised of 747 census-designated places, but has only 46 commercial band FM allotments. Of those 46 commercial allotments, 27 are Class A facilities. Thus, almost 60% of the commercial FM allotments to New Jersey are Class A facilities. New Jersey, then, is overwhelmingly, and, in comparison to other states, disproportionately, dependent upon the service provided by the smallest class of FM service. Only a mere 18.5% of these are 6 kW stations operating at or near maximum facilities.⁷

5. Exhibit 1 is a table of commercial FM stations allotted to the northeastern states in Zone I.⁸ Comparative data are presented as the number of stations per one million of population. The results dramatically demonstrate how severely New Jersey has been shortchanged in the allotment of FM stations. New Jersey has only 5.47 FM stations per one million of population. Its counterparts in Zone I have from 176% to 322% more stations per person than New Jersey. Applying the most conservative interpretation of these data, New Jersey has only slightly more than one-half the stations it might be expected to have, had it been treated in the same manner as, for example, Massachusetts.

⁶ *Id.*

⁷ Only seven of the 27 New Jersey commercial band Class A FM stations are authorized to operate at 6 kW (WVLT, Vineland; WTKU, Ocean City; WCZT, Villas; WBBO, Ocean Acres; WWZY, Long Branch; WWYY, Belvidere; and WSNJ-FM, which was recently re-allotted from Channel 299B, Bridgeton, to Channel 300A, Pennsauken). However, WBBO and WWZY are directional, and WWZY loses a substantial portion of its signal over water, leaving only five Class A stations operating at or near maximum facilities.

⁸ With the exception of New York, states that are only partially located on Zone I were excluded from the study. The Zone I central states of Indiana and Illinois were also excluded.

6. Of particular note in Exhibit 1 are the adjacent states of New York and Pennsylvania. New York has 241% more stations per person than New Jersey and Pennsylvania has an astonishing 322% advantage. As discussed below, one of the reasons for the extraordinary imbalance between New Jersey and its counterparts is the presence of high-powered stations in New York and Pennsylvania that preclude the allotment of stations — particularly higher powered stations that would be typically allotted to large metropolitan communities — to neighboring New Jersey. Also notable is the fact that the geographically small states of Delaware and Rhode Island also have significant advantages over New Jersey of more than 200%, thus demonstrating that the New Jersey Anomaly is not a function of size. Instead, it is the inevitable result of historical policies that have disadvantaged the citizens and commercial broadcasters of New Jersey — contrary to the requirements of Section 307(b) of the Communications Act. New Jersey has been treated as an afterthought in the allotment process.

7. The comparative state study in Exhibit 1 tells only part of the story of how FM stations have been misallocated to New Jersey. Not only has New Jersey received a disproportionately low number of FM allotments in comparison with its neighbor states, but almost 40% of those stations are allotted to the least populous region of the state. Exhibit 2 is a map plotting the transmitter sites of the 18 stations located in Atlantic and Cape May Counties.⁹ These 18 stations are located in two counties with an aggregate population of 354,878 (Cape May: 102,326; Atlantic: 252,552), representing only 4.2% of the state's population. With a few exceptions, these stations are at or near the ocean shore, so they cannot be expected to cover more populous, neighboring counties. Moreover, 5 of the 14 New Jersey Class B stations — a class that was created to cover large metropolitan areas — are located in this geographic area.

⁹ WBHX is located on Long Beach Island at the southeastern most end of neighboring Ocean County, six miles from the border of Atlantic County.

The task of serving the more populous regions of the state falls to just 28 FM stations. This corresponds to a ratio of roughly 3.47 stations per one million of population in the rest of the state. By no reasonable standard can this lopsided scheme be deemed to satisfy the “fair, efficient, and equitable distribution” required by Section 307(b).

8. Exhibit 3 analyzes the coverage areas of the commercial band allotments as a percentage of maximum class facilities. This analysis reveals the degree to which New Jersey FM radio stations, particularly Class A stations, operate at less than maximum class facilities. Twenty of the 27 Class A stations operate with a coverage area that is less than 85% of the maximum for the class (2,516 sq km), and five of the 14 Class B stations operate with less than 85% maximum class service area (13,314 sq km). These handicaps are only marginally offset by the fact that the five B1s operate with greater than 85% of maximum class coverage areas (6,277 sq km).¹⁰ The average coverage area for all stations is a low 81% of maximum class and 75% for Class A stations.

9. As disturbing as these data are, the actual situation in New Jersey is even worse. Because the Commission has allowed high-powered stations in the neighboring states of Pennsylvania and New Jersey to dominate the broadcast landscape in New Jersey, many stations have been driven to the water’s edge. Column 5 of Exhibit 3 shows what portion of each station’s primary service contour lies over the ocean. The net effect of the coverage losses attributable to both short-spacing and loss of signal over water is computed in the last column of Exhibit 3. Twenty-five of the 46 stations allotted to New Jersey lose more than one-third of their signals over the ocean. In other words, more than one-half of New Jersey stations are covering two-thirds or less of the area they would have covered had they been built as maximum facilities

¹⁰ One of the B1 stations, WCAA, is physically located in New York City.

at the center — rather than the periphery — of populated areas. Eleven of these stations cover only one-third or less of what they would achieve as maximum class stations.

10. In contrast to their cross-river brethren, New Jersey's FM broadcasting stations focus on New Jersey, consistently furnishing a high degree of local news, traffic, weather, public service, journalism and discussion on topics germane to New Jersey. New Jersey broadcasters have been accomplishing this task relying largely on underpowered Class A and disadvantaged Class B radio stations.

11. Today, New Jersey's underpowered Class A stations with "protected contours" of a mere 15 miles are attempting to serve millions of people in broad geographic areas such as Monmouth-Ocean (a market in excess of 1.1 million, with boundaries 65 miles long and 30 miles wide) and Middlesex-Somerset-Union (a market in excess of 1.5 million, with boundaries 31 miles long and 26.5 miles wide) to name but two. Class A stations in New Jersey are doing the job intended for Class B stations while generally operating at less than half the power normally assigned to Class A stations. As discussed below, Class B stations operate under severe handicaps that prevent them from covering the service area for which the class was created. Growth of New Jersey communities has increased the New Jersey Anomaly without any remediation from the FCC. A flood of LPFM and translator stations without suitable protections will exacerbate the problem.

12. The entire state of New Jersey has experienced dramatic urban and suburban growth over the past several decades. Once rural areas are now burgeoning metropolises. Increasing urban and suburban expansion and the concomitant increase in building density has left NJBA's members struggling to cover their allocated service areas and populations with quality signals. Thus, listeners are increasingly deprived of local news, information and

entertainment programming. While NJBA recognizes that the Commission has no control over growth patterns in the state, it can act to limit the new interference that will be introduced by the flood of LPFM and FM translators that are acceptable and grantable under its current rules.¹¹

B. FM Stations Have Not Been Fairly Allocated to the State of New Jersey

13. Local service is essential to Section 307(b)'s "fair, efficient and equitable" distribution of radio services.¹² The relief requested here is indispensable to the continued provision of local service furnished by New Jersey's radio stations and upon which New Jersey's radio listeners rely.

14. Section 307(b) is not a static standard. It imposes upon the Commission an ongoing obligation to forestall excessive concentration of FM assignments in larger cities and to ensure adequate service to smaller communities."¹³ Precisely the opposite allotment system occurred in New Jersey. This is the inevitable consequence of the allotment of large numbers of FM stations to New York and Philadelphia, at the expense of significant and substantial New Jersey communities.

15. Notwithstanding Section 307(b)'s charge, New Jersey has largely become an electronic media desert in another important respect. Despite its substantial population, the state was overlooked in the post-World War II revolution that swept America into the new electronic age of television and FM radio. The fact that New Jersey ended up without a single commercial

¹¹ AM broadcasters in New Jersey are in no position to fill the void created by the New Jersey Anomaly. Of 40 AM stations allocated to New Jersey, only nine have nighttime power greater than 1000 watts. Fourteen are daytimers or virtual daytimers with nighttime power of 250 watts or less. *Broadcasting & Cable Yearbook 2003-2004*.

¹² See *Pasadena Broadcasting Co. v. FCC*, 555 F.2d 1046, 1050-51 (D.C. Cir. 1977) (local service is essential to the "fair, efficient and equitable" distribution of radio services).

¹³ *Communications Investment Corp. v. FCC*, 641 F. 2d 954, 963-64 (D.C. Cir. 1981).

VHF TV station¹⁴ and with only a handful of higher power Class B FM radio stations *vis a vis* its cross river neighbors exemplifies its status. The net effect of these policies is that New Jersey has been treated unfairly, inefficiently and inequitably.

16. Many of New Jersey's largest communities have no commercial FM allotments. For example, looking only at communities with a population of 50,000 or greater, none of the following communities have commercial channels allotted to them:

- Bayonne, population 61,842
- Brick, population 76,119
- Cherry Hill, population 69,965
- Clifton, population 78,672
- East Orange, population 69,824
- Edison, population 97,687
- **Elizabeth, population 120, 568**
- Gloucester, population 64,350
- Hamilton, 87,109
- Irvington, population 60,695
- **Jersey City, population 240,055**
- Lakewood, population 60,352
- Middletown, population 66,327

¹⁴ Channel 13 (WNET), Newark, was originally licensed to Atlantic Television as a commercial station in 1949. Following its economic failure in 1961, Channel 13 was sold to Educational Broadcasting Corporation, which converted it to non-commercial status. Channel 13 operates as a *de facto* New York station. Congress attempted to bring a VHF station to New Jersey in the wake of the RKO scandal. In 1983, Channel 9 (WWOR-TV) was reallocated to Secaucus. Currently, however, Channel 9 is only nominally a Secaucus station. Its studios, news operations, and transmission facilities are located in New York City.

- North Bergen, population, 58,092
- Old Bridge, population 60,456
- Passaic, population 67,861
- Piscataway, population 50,482
- Union, population 67,088
- Wayne, population 54,069
- Woodbridge, population 97,203

It may be unreasonable to expect that all, or even the majority, of these communities, should have no FM allotments. It is completely inconsistent with the objectives of Section 307(b) that cities the size of Jersey City and Elizabeth are without at least one commercial FM allotment.

17. Not only have New Jersey's communities been shortchanged in the allotment process, but entire New Jersey **counties** have no local commercial FM stations. Of 21 New Jersey counties, six — comprising approximately 33% of New Jersey's population — are without local FM service allotted to their communities:

- Bergen County, population 884,118
- Burlington County, population 423,394¹⁵
- Gloucester County, population 254,673
- Hudson County, population 608,975
- Hunterdon County, population 121,989
- Union County, population 522,541

¹⁵ Station WPST has a Petition pending before the Commission to change its community of license from Trenton to Burlington County. While this will have the beneficial effect of finally bringing a local FM station to Burlington, it comes at the expense of another New Jersey community, without any net improvement to the situation in the state.

How is it possible to reconcile the objectives of Section 307(b) with the fact that counties the size of the foregoing, particularly Bergen, Hudson and Union Counties, are without at least one full power commercial FM allotment?

18. Middlesex County, population 750,162, and Morris County, population 470,212, each have only one commercial band Class A allotment. Passaic County, population 489,049, has a single Class B station with its transmitter site located in New York City. Until only very recently, Camden County, population 508,932, had but one commercial allotment, with its latest allocation being a Class A re-allotment to Pennsauken at the expense of a Class B allotment to Bridgeton.¹⁶

19. Only one conclusion can be drawn from the foregoing: Radio service that should be devoted to the state of New Jersey has been inequitably allocated to communities in other, nearby states. Had FM radio service been fairly and properly allocated to New Jersey in accordance with Section 307(b), more New Jersey communities would have allotments, many more of which would be Class B allotments and the New Jersey Anomaly would not exist.

20. Each of the foregoing geographic areas is largely, if not entirely, dependent upon stations in adjacent counties or cities for New Jersey oriented local commercial FM service. Because they have no alternative, many listen to so-called “local” news, which is actually about nearby, out-of-state communities such as New York and Philadelphia, in lieu of their own “local” news. New Jersey communities fortunate enough to have a true “local” station are largely served by underpowered Class A and disadvantaged Class B radio stations. In general, both large and small communities with no stations must rely on neighboring FM stations for

¹⁶ *Amendment of Section 73.202(b), FM Table of Allotments, FM Broadcast Stations (Bridgeton and Pennsauken, New Jersey)*, 18 FCC Rcd 12192 (2003) (substituting Channel 300A at Pennsauken for Channel 299B at Bridgeton).

local news. In many cases, the signals from neighboring FM stations come from far outside their protected contours.¹⁷ Those stations must, in turn, overcome ever-increasing obstacles to serve their own communities, much less neighboring counties/communities.

21. The Section 307(a) “public interest, convenience and necessity” licensing standard obligates the Commission to ensure that all citizens are provided with programming responsive to their needs and interests. The Commission recognized this obligation over twenty years ago when it stated that:

[T]he history of governmental involvement in non-entertainment programming has been driven by one overriding concern — the concern that the citizens of the United States be well informed on issues affecting themselves and their communities.¹⁸

22. The Commission has previously recognized that Section 307(b) imposes a continuing obligation “to assess the extent to which these FM practices were achieving the desired objectives.”¹⁹ In the spirit of that obligation, NJBA proposes that the Commission adopt a Notice of Proposed Rulemaking to adopt the reforms necessary to ensure that New Jersey residents continue to receive and enjoy the wealth of information they obtain from their state’s commercial broadcasters.

23. New Jersey’s broadcasters previously advanced a reasonable proposal to improve the service furnished by the state’s broadcasters.²⁰ Although the Commission ultimately adopted

¹⁷ See paragraphs 68 *et seq.*

¹⁸ *In the Matter of Deregulation of Radio*, 84 FCC 2d 968, 977 (1981).

¹⁹ *Revision of FM Assignment Policies and Procedures*, 90 FCC 2d 88 at para. 3.

²⁰ See *Notice of Proposed Rule Making in MM Docket 88-375*, 3 FCC Rcd 5941 (1988) (New Jersey Class A Broadcasters Association request that the maximum permitted effective radiated power for Class A FM broadcast stations be increased from 3000 to 6000 watts).

a variation of the New Jersey proposal,²¹ New Jersey's broadcasters achieved little to no benefit, because only a handful of New Jersey's Class A stations were able to take full advantage of increased coverage as the Commission fashioned the new rule.²² New Jersey, both its people and its broadcasters, deserve Commission recognition of their unique broadcasting coverage problem.

24. Notwithstanding the limitations on the range of their signals, the local radio service provided by the vast majority of New Jersey's broadcasters strives to ensure that the state's citizens are "well informed on issues affecting themselves and their communities."²³ Unfortunately, however, many New Jersey citizens remain uninformed on such issues because of Commission allocation policies that have left large areas of the state without "local service." To overcome these deficiencies, NJBA submits this proposal to promote local service.

II. COMMISSION POLICIES HAVE HISTORICALLY UNDERMINED RADIO BROADCASTING IN NEW JERSEY

25. New Jersey's present condition can be traced back to Commission allotment and facilities decisions and policies that have long favored high-powered Class B and C stations over Class A stations. These policies and decisions might not have been so disastrous had New Jersey received a fair allotment of Class B stations. Instead, most higher power stations were allotted to neighboring New York and Pennsylvania. As a consequence, New Jersey is populated largely with underpowered Class A stations that are inadequately protected from

²¹ *Amendment of Part 73 of the Rules to provide for an additional FM station class (Class C3) and to increase the maximum transmitting power for Class A FM stations*, 4 FCC Rcd 6375 (1989).

²² See para. 35 *infra*.

²³ *Id.*

interference that would arise from large numbers of translator and LPFM stations operating in the state.

26. The Commission's current allotment strategy focuses on station class. "The rules applicable to a particular station, including minimum and maximum facilities requirements are determined by its class. Possible class designations depend upon the zone in which the station's transmitter is located."²⁴ Initially, however, the FM service was comprised of a single class of higher powered stations. It was the revision of these initial rules that reduced New Jersey to where it is today; a state served largely by inadequately protected, underpowered Class A stations, striving to serve rapidly growing communities and a highly sophisticated populace for which the class was not intended.

27. In the next major development of FM regulation, the Commission's rules provided for only two classes of stations: (1) low power Class A stations limited to 1 kW ERP and 250 feet HAAT, or equivalent, assigned in Areas 1 and 2, and (2) Class B stations authorized on 60 channels in Area 1 with no more than 20 kW ERP and 500 feet HAAT, or equivalent with no fixed maximum in Area 2.²⁵ In 1962, however, the Commission adopted its Plan II to divide the country into three zones (instead of the previous 2). Zone I includes all or part of 18 northeastern states (including New Jersey) and the District of Columbia. Zone I-A is limited to southern California; and the rest of the country is in Zone II. Under the Plan, Class A stations are assigned to all zones; Class B stations are assigned to Zones I and I-A; and Class C stations are assigned to Zone II.²⁶

²⁴ Section 73.210(a) of the Commission's rules.

²⁵ See *Revision of FM Broadcast Rules, Particularly as to Allocation and Technical Standards* ("Docket 14185"), 40 FCC 662, 678 (1962).

²⁶ *Id.*

28. This decision not only maintained, but also exacerbated the huge disparity between Class A stations and their higher powered counterparts. While the Commission adopted new rules increasing the Class A maximum to 3 kW at 300 feet, the Class B maximum was increased to 50 kW ERP at 500 feet HAAT. Class B stations meeting the newly established spacings were permitted a blanket power increase of 30,000 watts. The new Class C stations were permitted maximum facilities of 100 kW ERP at 2,000 feet HAAT.²⁷ Class A stations were left with a primary service radius of 15 miles; one that pales in comparison to the 40 and 57 mile service radius allotted to Class B and C stations respectively.²⁸

29. Class B stations were permitted to increase power largely to cover expanding communities.²⁹ Class A stations in New Jersey have been doing the same — providing service to ever-expanding communities, only without the protections afforded to the Class Bs. Since 1962 Class B stations have enjoyed greater interference protection than did Class A stations. Class A station separations were previously based on protection to the 0.912 mV/m contour while Class B separations were based on protecting the 0.524 mV/m contour.³⁰ As a result, Class B stations enjoyed much larger protected service areas than did Class A stations for reasons that transcend mere higher power. Class B stations were granted wider service areas in recognition of the fact that large metropolitan communities in the northeast averaged 33 to 40

²⁷ *Id* at 681.

²⁸ *See Modification of FM Broadcast Station Rules to Increase Availability of Commercial FM Broadcast Assignments* (“Docket 80-90”), 94 FCC 2d 152, 183 (1983).

²⁹ *See generally*, Docket 14185, 40 FCC at 662.

³⁰ *Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments, Docket 80-90, Memorandum Opinion and Order*, 94 FCC 2d 152, 175 (1983), *recon. granted in part*, 97 FCC 2d 279 (1984).

miles in radius at the time. A smaller service area would have been totally unacceptable for many communities in Zone I.³¹

30. There are striking similarities between the circumstances that led the Commission to adopt and preserve a wider service area for Class B stations and the situation facing New Jersey today. Many New Jersey communities are largely dependent on Class A stations, serving larger geographic areas than those intended for the class. Unless the Commission grants the proposals in this petition, the service areas for these stations will become fragmented and more inadequate. For the most part, listeners to these stations will not receive substituted service. Instead, large pockets of New Jersey communities will lose service they currently have to interference. Examples of the expected loss of service are strikingly demonstrated in the maps that accompany Exhibits 12 and 13, and as discussed below at paragraph 80.

31. The disparity between a Class A station and its higher powered counterparts was long aggravated by the Commission's policy of authorizing stations to operate at less than the maximum for their class.³² "[S]eparation requirements are based upon the assumption that each assigned station is, or at some time in the future will be, operating at the maximum power and antenna height for its particular class."³³ Allowing stations to operate at less than the maximum requires other stations to protect areas where there is no service to protect.³⁴

³¹ *Id.*

³² *See Docket 80-90*, 94 FCC 2d at 153 (as of 1980, 80% of Class C stations and 35% of all FM stations were operating significantly below the maximum permitted for their class). *See also*, *1998 Biennial Regulatory Review — Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules*, 13 FCC Rcd 14849, 14868 (1998) ("519 of the 863 FM stations presently occupying Class C assignments, or approximately 60 percent, operate with facilities less than [the maximum] 450 meters HAAT").

³³ *Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments*, 78 FCC 2d 1235, para. 11 (1980).

³⁴ *Id.*

32. Other policies also favored higher powered stations to the detriment of Class A stations. For example, in *Docket 14185* the Commission established community size as the determining factor for the assignment of channels. “Class C stations are ‘designed to render service to a community, city or town and large surrounding area’ (Section 73.206(b)(4)); Class B facilities are intended ‘to render service to a sizeable community, city or town or to the principal city or cities of an urbanized area, and to the surrounding area’ (Section 73.206(b)(2)); and Class A stations are ‘designed to render service to a relatively small community, city or town and the surrounding rural area (Section 73.206(a)(2)).”³⁵

33. The Commission ultimately rescinded this rule in 1982 after granting numerous waiver requests allowing the allotment of higher class channels to Class A communities.³⁶ The net effect of these policies was disastrous to the equitable distribution of FM broadcast stations to New Jersey. By allotting Class A, instead of Class B, stations to growing communities in New Jersey, and by disproportionately allotting more powerful stations to the neighboring states of New York and Pennsylvania, the Commission condemned New Jersey broadcasters to a permanent state of second class status, contrary to the directives of Section 307(b) of the Communications Act. Many of the Class B and B1 stations are short spaced, pushed to the water’s edge, or allocated to the least populous areas of the state. Underpowered Class A stations struggle to bring service to communities that should be served by higher-powered stations.

³⁵ *Amendment of Part 76 of the Commission's Rules and Regulations to Govern Importation of Radio Signals by Cable Television Systems*, 67 FCC 2d 491, ____ (1978). Section 73.206 has been rescinded.

³⁶ *Revision of FM Assignment Policies and Procedures*, 90 FCC 2d 88 (1982).

34. The Commission attempted to improve the ability of Class A stations to serve larger communities by adopting rules that permitted Class A stations to increase effective radiated power from 3000 to 6000 watts.³⁷ Interestingly, one of the factors that the Commission took into account in its proceedings was the need to “offset some of the competitive disadvantages currently faced by Class A stations.”³⁸ That result was not broadly achieved in the state of New Jersey.

35. Although the Class A proposal was initiated by the New Jersey Class A Broadcasters Association, in the final analysis, only four³⁹ New Jersey stations were granted full relief under the revised rules as Class A stations.⁴⁰ More than 80% of the state’s Class A stations were left as, and are today, severely under-powered, facilities. Consequently, the state’s Class A stations are particularly vulnerable to interference from translators and LPFM stations.

36. The situation facing the state’s Class B stations is not much better. Full facility 50 kW Class B stations, absent substantial interference, have protected contours of 40 miles and, considering the relatively flat terrain over a substantial portion of the state, a practical receiving range of over 50 miles. But very few New Jersey Class B stations come close to achieving the full potential of a Class B allocation. The following chart summarizes the Class B allocations in New Jersey.

³⁷ *Amendment of Part 73 of the Rules to provide for an additional FM station class (Class C3) and to increase the maximum transmitting power for Class A FM stations*, 4 FCC Rcd 6375 (1989).

³⁸ *Amendment of Part 73 of the Rules to provide for an additional FM station class (Class C3) and to increase the maximum transmitting power for Class A FM stations*, Notice of Proposed Rulemaking, 3 FCC Rcd 5941, para. 18 (1988).

³⁹ See Footnote 7.

⁴⁰ WOJZ, Egg Harbor City was also permitted to upgrade to B1 status.

Class B Stations

Region	Number of stations	Comments
Atlantic City/ Cape May	5	Only one station approaches full Class B facilities. One station is licensed to a community in neighboring Cumberland County, but has its transmitter site located in Atlantic County. In general, Atlantic City area stations are of low height, because of FAA restrictions and short spacing.
Trenton	4	With one exception, all stations are highly directional.
Somerset	1	
Newark	3	One non-commercial station broadcasting on the commercial band; one that is short spaced to other New Jersey stations; the transmitter for the third is located in New York City; in contrast 15 commercial band Class B stations are licensed to neighboring New York City.
Camden	1	Non-commercial station broadcasting on the commercial band; in contrast 13 commercial band Class B stations are licensed to neighboring Philadelphia.
Other	2	Although licensed to New Jersey, these two stations have transmitter sites located in New York City.

37. Only four of the state's class B stations broadcasting from within the state approach full, reasonably interference free facilities. The remaining Class B stations operate with moderate to severely impaired facilities. Consider that two of four Class B stations licensed to Trenton are highly directional facilities, with most of their power pointed toward Pennsylvania, rather than New Jersey, the state to which they are licensed to serve. Moreover, one of the least populated regions of the state (Atlantic City/Cape May) has been favored with the highest concentration of Class B stations because it is located the furthest from New York and Philadelphia.

38. There are also five Class B1 stations licensed to New Jersey. Three are licensed in counties with comparatively sparse populations: two in Atlantic County and one in Sussex

County. Two of the Class B1 stations two are highly directional. The transmitter site for the fifth Class B1 station is physically located in New York City.

III. AN INFLUX OF LPFM AND TRANSLATOR STATIONS WILL EXACERBATE THE NEW JERSEY ANOMALY

39. On February 6, 2003, the Commission announced an auction filing window for certain FM translator station construction permit applications.⁴¹ In January of 2000, the Commission adopted a Report and Order establishing a low power FM radio service.⁴² The cumulative effect of these developments will be to devastate the New Jersey broadcasting landscape with the influx of hundreds of applications for LPFM and translator stations. If allocated and assigned, many of those new stations will result in the creation of significant new interference to existing service, cause massive disruptions to long established listening patterns and, in general, lay waste to the broadcast landscape as it currently exists.

40. The public interest will not be served by the indiscriminate introduction of new secondary services such as LPFM and translator stations into a state that already has had to make do with substandard facilities for the better part of the history of FM radio.⁴³ NJBA seeks only the minimum relief required to redress this problem in furtherance of Section 307(b)'s mandate

⁴¹ *Public Notice, FM Translator Auction Filing Window and Application Freeze*, DA 03-359, (February 6, 2003).

⁴² *Creation of Low Power Radio Service, Memorandum Opinion and Order on Reconsideration*, FCC 00-349 (2000).

⁴³ NJBA is not opposed to LP100 and similarly sized translator stations as a general matter and does not oppose their establishment in areas outside the practical range of listenership of licensed commercial broadcast stations. Inside that range, however, their introduction almost diabolically exacerbates the very problem the Commission seeks to address by establishing the LPFM class of service.

that spectrum be allocated fairly, efficiently and equitably and in a manner that will provide the most beneficial local service.⁴⁴

A. FM Translator and LPFM Stations Will Operate at the Expense of New Jersey Listeners

41. FM translator stations, though not subject to minimum distance separation requirements, are subject to contour overlap requirements.⁴⁵ FM translator stations are currently required to protect Class B stations to the 54 dBu contour, Class B1 stations to the 57 dBu contour, and all other classes to the 60 dBu contour.⁴⁶

42. Under this methodology, prohibited interference occurs when the interfering contour of one station overlaps the protected contour of another station. Station A “causes” interference to Station B if Station A’s interfering contour overlaps Station B’s protected contour. Station A “receives” interference from Station B if Station B’s interfering contour overlaps Station A’s protected contour. The second and third adjacent channel interfering contours were calculated on the basis of a 40 dBu desired to undesired (D/U) signal strength

⁴⁴ In addition to physical interference of broadcast signals, the introduction of translators and LPFMs, on the same frequency and in the same markets as existing broadcasters, generates a pernicious form of economic interference. Many FM stations rely on Arbitron ratings in order to generate income to pursue the broadcaster’s mission. These ratings can become distorted when two stations operate on the same frequency in the same market. It would be wrong to think that this phenomenon is an essential consequence of economic competition. Economic competition takes place between stations on different frequencies or between free over-the-air radio and satellite radio. It should not occur as the result of market fragmentation on the same frequency. What is especially significant in New Jersey is that this type of fragmented frequency allocation would not occur if communities in the state had been allotted an equitable number of high powered stations as required by Section 307(b) of the Communications Act. Accordingly, the Commission should also implement a rule prohibiting translator stations from occupying frequencies within Arbitron markets that are already occupied by existing broadcasters.

⁴⁵ Section 74.1204(a) of the Commission’s rules.

⁴⁶ Section 74.1204(a) (1), (2) and (3) of the Commission’s rules.

ratio. This methodology is inadequate to protect a population consisting principally of underpowered, Class A FM stations.

43. In January of 2000, the Commission adopted a Report and Order establishing a low power FM radio service with the laudable goal of “provid[ing] opportunities for new voices to be heard, while at the same time preserving the integrity and technical excellence of existing FM radio service and safeguarding its transition to a digital transmission mode.”⁴⁷ Everyone hopes the Commission’s plan will accomplish the former, but, particularly in New Jersey, its plan does not serve the latter goal of “preserving the integrity and technical excellence of existing FM radio service.”⁴⁸ The service will significantly impair the operation of FM stations in New Jersey, to the detriment of their operations and the public interest.

44. The Commission authorized two new classes of FM radio service. First, it authorized an LP100 class consisting of stations with a maximum power of 100 watts ERP at 30 meters HAAT, providing a signal level equivalent to the FM “protected” service (1 mV/m or 60 dBu) within a radius of approximately 3.5 miles. Second, it authorized an LP10 class consisting of stations with a maximum power of 10 watts ERP at 30 meters HAAT, providing the same signal strength out to approximately 1 or 2 miles from the station’s antenna.⁴⁹

45. Under Section 73.807 of the Commission’s rules, LPFM stations must meet specified co-, first- and second-adjacent channel spacings to full power FM and FM translator stations, and co- and first-adjacent channel spacings to other LPFM stations.⁵⁰ “[D]istance

⁴⁷ *Creation of Low Power Radio Service, Memorandum Opinion and Order on Reconsideration*, FCC 00-349 ¶ 1 (2000), *citing Report and Order*, 15 FCC Rcd 2205 (2000).

⁴⁸ *Id.*

⁴⁹ *Creation of a Low Power Radio Service Report and Order*, 15 FCC Rcd 2205 (2000).

⁵⁰ *Creation of a Low Power Radio Service, Second Report and Order*, FCC 01-100 at ¶ 3 (2001) (amending the rules to prescribe LPFM station third adjacent channel interference protection

separations were based on the sum of the distances to: (1) the F(50,50) contour of the “protected” station; and (2) the F(50,10) contour of the ‘interfering’ station as calculated in accordance with 47 C.F.R. §§ 73.313 and 73.333. Full power and LPFM stations were assumed to operate at maximum facilities. Class B stations were protected to the 54 dBu F(50,50) contour and Class B1 stations to the 57 dBu F(50,50) contour. All other classes of stations (including LPFM stations) were protected to the 60 dBu F(50,50) contour.”⁵¹

46. As discussed herein, NJBA proposes that, for all LP100 stations and similarly sized translators licensed to New Jersey communities, the rules be amended to employ spacings based on the use of, and which provide protection to, the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities licensed to New Jersey communities, assuming maximum permitted facilities for each station. NJBA also proposes the use of the 20 dB D/U ratio for the second adjacent channel. Exhibit 4 sets forth proposed minimum spacing requirements between LP100 stations and full power FM stations in New Jersey, for

standards). *See also Creation of Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205 (2000). The Commission’s initial LPFM technical rules did not impose third-adjacent channel minimum distance separation requirements on LPFM stations. The Commission subsequently adopted complaint and license modification procedures to ensure that significant third-adjacent channel interference problems would be resolved expeditiously. *Creation of Low Power Radio Service*, 15 FCC Rcd 19208 (2000). The Commission was subsequently required by an act of Congress to impose third-adjacent channel minimum distance separation requirements on LPFM stations, and to conduct independent field tests and an experimental program to determine whether the elimination of third-adjacent channel protection requirements would result in LPFM stations causing harmful interference to existing FM stations operating on third-adjacent channels. *D.C. Appropriations — FY 2001*, Pub. L. No. 106-553, § 632, 114 Stat. 2762, 2762A-111 (2000). *See also Creation of Low Power Radio Service*, 16 FCC Rcd 8026 (2001). *See Creation of a Low Power Radio Service, Second Report and Order*, FCC 01-100 (April 02, 2001) (adopting third adjacent channel spacing requirements). On February 19, 2004, the Commission reported its findings to Congress, recommending the elimination of third adjacent minimum distance separation requirements. *Report to the Congress on the Low Power FM Interference Testing Program* Pub. L. No. 106-553, February 19, 2004.

⁵¹ *Creation of a Low Power Radio Service*, FCC 01-100 at para. 3.

incorporation in Section 73.807 of the Commission's rules. Exhibit 5 sets forth proposed values governing overlap of the interference contours of translator stations and protected contours of full power FM stations in New Jersey, for incorporation in Section 74.1204(a) of the Commission's rules. LP10 stations and LP Translators are inefficient uses of scarce and congested spectrum in New Jersey and should be prohibited in the state.

47. NJBA believes that these standards describe a reasonable service area in light of the unique circumstances facing the New Jersey audience. At this time, NJBA is not requesting modification of the Table of Allotments. Nor is NJBA asking for any change to current rules or policies regarding full power broadcast stations. The Commission should impose an immediate freeze on the acceptance for filing and grant of any applications for construction permits or licenses for LPFM or translator stations in the state of New Jersey, pending the disposition of this Petition. However, NJBA does not propose that the Commission revoke licenses that have been previously granted. The proposals presented in this Petition are carefully calibrated to protect New Jersey listeners from material loss of service from interference. Adoption of NJBA's proposal will serve the Commission's interest in both localism and spectrum efficiency.

B. LPFM and Translator Stations Do Not Contribute to Spectrum Efficiency

48. For some time, the Commission has recognized the need for increased spectrum efficiency in the FM band because of the increase in the number of stations since 1983.⁵² Unfortunately, its actions have not always followed in step with its words. Exhibit 6 illustrates the large area of spectrum space occupied by the interfering contours of LPFM stations compared to the relatively small areas serviced by such stations. An LP10 station operating at

⁵² 1998 Biennial Regulatory Review — *Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules*, FCC 00-368, para. 23 (2000) ("The substantial increase in the number of licensed stations since 1983 magnifies the need for measures to increase the efficiency of FM spectrum use").

maximum facilities has a service area of 12.36 square miles. Using the Commission's current standards, the interference contour for an LP10 ranges from 126.26 square miles, with respect to Class A stations, to 244.69 square miles, with respect to Class B stations. In other words, for a service area of a mere 12.36 square miles, an LP10 carves out an area of interference that is almost 2000% larger with respect to Class B stations. In New Jersey, this would result in cannibalization of existing service.

49. As applied to New Jersey, creation of the LPFM service, and more particularly the LP10 service, as well as the authorization of LP Translators, is diametrically opposed to the Commission's goal of a spectrum efficient FM service. The decision to create an LP10 Class constitutes an almost complete about-face from previous efforts to deal with the inefficiencies of 10-watt stations and translators and their preclusive effect on "the establishment or extension of operations to bring service where it was needed."⁵³ The harm these low power stations will create far outweighs any benefit they will provide and the Commission should preclude their establishment in the state of New Jersey.

50. The Commission's new LP10 class of stations will create the same problems now that led the Commission to impose a freeze on similarly situated stations in the late 1970s. As the Commission concedes, the FM landscape is far more cluttered today than it was when the Commission took that action.⁵⁴ The preclusive effect these stations will have on the provision of service where needed is exponentially greater now than when the Commission imposed its freeze.

51. A significant problem with the earlier Class D low power stations was that:

⁵³ *Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations*, 70 FCC 2d 972, 973 (1979).

⁵⁴ See n. 18, *supra*.

the assignment ... proceeded on a demand system without any attempt ... to have a Table of Assignments of channels to particular localities or, in any part of the country, to require the use of at least minimum facilities. **The consequence was an inefficient pattern of assignments.**⁵⁵

Nevertheless, that is precisely the regime the Commission has established for both translator stations and LPFM stations. Perhaps unintentionally, the Commission has resurrected nearly the exact scheme that, over twenty years ago, it determined failed to serve the public interest. It is crucial that the Commission step back and take into account the debilitating state of affairs in New Jersey broadcasting, to take all possible steps to avoid aggravating the situation.

52. The Commission's licensing model also fails to take into account changing FM listening patterns. The FM audience no longer consists of static listeners, sitting at home, receiving FM signals from a fixed antenna. Instead, the audience has become dynamic, listening primarily in a mobile environment with more challenging reception requirements. The dynamic nature of the FM audience is evidenced by Exhibit 7, which details listening location performance for WKXW-FM, Trenton.⁵⁶ Eighty-two percent of the station's winter cume audience was in car. When considered as a percentage of AQH audience, in-car audience was 57%.

53. With the indiscriminate invasion of LPFM and translator stations in New Jersey, the mobile listener will typically drive into one or more large areas of interference. If New Jersey had received an equitable allotment of full power FM stations, these interference regions might be less pervasive. But in a broadcast environment relying disproportionately on disadvantaged Class B and underpowered Class A stations, the effect will be catastrophic.

⁵⁵ Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations, 70 FCC 2d 972, para. 5 (1979).

⁵⁶ WKXW-FM listener statistics are further described in paragraphs 72 *et seq.*

Listeners expect interference free reception. They will not tolerate fluctuating signals arising from squalls of interference, as they drive through the signals of LPFM and translator stations scattered through the service areas of full power FM stations. The result will be the wholesale abandonment of New Jersey FM by its audience in favor of clear reception from satellite, CDs and MP3s. The Commission cannot wish to preside over the dismemberment of FM broadcasting in New Jersey.

54. The licensing of LPFM and translator stations without adequate regard for the existing FM service, at least in the state of New Jersey, will severely degrade commercial band FM service, perhaps beyond repair. This rulemaking petition requests that the Commission take the logical step of examining how available spectrum can be put to the best use to prevent the further debilitation of a handicapped service, and to explore how to strengthen that service.

55. The Commission claims to have “safeguarded the technical integrity of the FM band since 1962.”⁵⁷ That statement is open to question in the case of New Jersey. There is no question, however, that more recent Commission decisions — specifically its adoption of rules establishing an LPFM service (and particularly the LP10 service) and its recent opening of a window for the virtually unfettered filing of translator station applications — might rob much of the state of the limited service it currently enjoys.

56. These actions must be viewed in their historical context. Had the state been more equitably treated over the years since FM’s inception these decisions might be less catastrophic to New Jersey’s broadcasters.

⁵⁷ *1998 Biennial Regulatory Review — Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules*, FCC 00-368, para. 23.

C. The Commission Should Freeze New Jersey LPFM and Translator Applications While It Explores How to Proceed with Digital Audio Broadcasting

57. On April 15, 2004, the Commission issued a *Further Notice of Proposed Rule Making* seeking comment on what rule changes and amendments are necessary due to the advent of digital audio broadcasting (“DAB”).⁵⁸ Among other things, the Commission will revisit Section 73.313 of the Commission’s rules to determine whether predictions of field coverage should continue to be made without regard to interference.⁵⁹ It would not make sense to grant hundreds of new LPFM and translator applications — which will increase interference in New Jersey — before the DAB enquiry has an opportunity to determine whether this rule needs to be modified to encompass the different nature of digital audio transmissions.

58. The Commission has selected in-band, on-channel (“IBOC”) as the technology enabling AM and FM radio broadcast stations to commence digital operations. In hybrid mode, the IBOC system places digital information on the frequencies immediately adjacent to the analog signal. The addition of hundreds of LPFM and translator stations into New Jersey, where most FM stations are already severely short-spaced and underpowered, will lead to further adjacent band interference, possibly precluding the introduction of DAB to the state.

59. The history of Commission action in New Jersey has been to treat the state as an afterthought. The appropriate forum for determining the best method of assuring the introduction of IBOC to New Jersey is in the DAB rulemaking proceeding. The grant of new LPFM and translator applications would be tantamount to a premature decision on the future of DAB in New Jersey. New Jersey must not be excluded from the digital revolution. The

⁵⁸ FCC 04-99, MM Docket No. 99-325.

⁵⁹ *Id.* at para. 53.

Commission should freeze consideration of all New Jersey LPFM and translator applications while it explores how to proceed with DAB.

IV. NEW JERSEY'S PROPOSAL WILL FOSTER IMPORTANT COMMISSION POLICIES

60. NJBA's proposal will foster important Commission policies. NJBA proposes that special steps be taken to insure against deterioration of an already inequitable situation with respect to the allotment of FM stations to New Jersey communities. Improved local service, efficient utilization of scarce radio broadcast spectrum and the establishment of a competitive marketplace are each important Commission objectives. NJBA's proposal is not only consistent with, but will foster these objectives.

A. The Public Interest is Better Served by the Preservation of the Integrity of the FM Broadcasting Service in New Jersey

61. NJBA recognizes that implementation of its proposal will reduce the number of LPFM and translator stations that may be authorized in the state of New Jersey. Its goal, however, is not to stifle these services, but to ensure the maintenance of service that the listeners of New Jersey's stations have come to know and expect of their stations despite the New Jersey Anomaly.⁶⁰ NJBA does not deny that the public interest is served by "provid[ing] opportunities for new voices to be heard," but not at the cost of silencing existing voices, which in many cases have reliably served the New Jersey public for forty to fifty years and more. The public interest is also served, indeed, better served, through the "preserv[ation] [of] the integrity and technical excellence of existing FM radio service."⁶¹

⁶⁰ *Modification of FM and TV Authorizations to Specify a New Community of License ("Modification of FM Licenses")*, 4 FCC Rcd 4870 (1989), *recon. granted in part*, 5 FCC Rcd 7094, 7097 (1990) (the public has a legitimate expectation of continued local service).

⁶¹ Another dimension of spectrum efficiency in New Jersey relates to inconsistent Commission rules governing commercial and noncommercial translators that are co-owned by the licensee of

62. Current rules, however, do not reflect this balance. The Commission's minimum distance separation requirements for LPFM stations simply do not provide New Jersey stations the adequate protection the Commission sought to achieve by adoption of its minimum distance separation methodology. Likewise, the translator contour protection rules provide inadequate protection to New Jersey radio stations. Put another way, given the unique characteristics of the state of New Jersey, a significant issue exists regarding contour overlap into populated areas already receiving regularly used, off-the-air signals of authorized co-channel, first, second or third adjacent channel broadcast stations resulting in interference to the reception of those signals.

63. The Commission created the LPFM service under the banner of localism. However, nothing is more local than commercial New Jersey radio. Unlike much of the rest of the country, the vast majority of New Jersey radio stations are owned and/or operated by New Jerseyites committed almost solely to serving the needs and interests of their local communities. Large groups are the exception rather than the norm in New Jersey. Of the 46 New Jersey FM stations, an aggregate of only 10 stations are licensed to groups with a national presence.

the primary station. Under Section 74.1232(d) of the Commission's rules, the licensee of a commercial station is prohibited from operating a translator with a coverage contour that extends beyond its protected contour. There is no corresponding restriction on noncommercial licensees. Moreover, noncommercial licensees are permitted to extend their reach into the commercial band under Section 74.1202(b)(2). In view of the state of FM broadcasting in New Jersey, the Commission should review the advisability of applying the same rules to all FM translator stations broadcasting in the commercial band. With the set aside of the reserved band for noncommercial purposes, the Commission should explore whether the public interest will be better served by requiring translators that are co-owned or operated by noncommercial stations either to operate solely in that band or, if they are to be permitted in the commercial band, to be limited to fill-in rebroadcasting. Likewise, in order to preserve the Commission's scarce resources, FM translator applications proposing to receive their signals from translator stations that are also in the application stage should be refused, until the first translator station application is granted. Unless and until the first translator station application is granted, chained translator applications are merely contingent proposals, and should be denied in accordance with Section 73.3517 of the Commission's rules.

Among the remaining groups, one has a presence in four states and another in two, accounting for another nine New Jersey FM stations. The remaining 27 stations are licensed to New Jersey groups or owners of singleton FM stations.

64. New Jersey radio stations are on the front lines, operating 24 hours per day seven days per week and are a critical link in the Emergency Alert System. LPFM and translator station interference to New Jersey broadcast stations could critically impair New Jersey broadcasting from fulfilling their duty to inform their listeners of critical information.

65. LPFM stations, on the other hand, are required to operate only ten hours per day, have no EAS obligations and are subject to few if any public interest obligations. Their operation detracts from localism in the New Jersey Anomaly environment, particularly after taking into account the negative impact they will have on existing broadcast stations.

66. New Jersey stations, more than half of which are Class A stations, the vast majority of which operate at less than the maximum permitted for the class, fill the void with programming most attuned to the needs and interests of their local communities. As demonstrated herein, however, this is becoming an increasingly difficult proposition. Amendment of the Commission's rules as proposed in this Petition is necessary to preserve the integrity of FM broadcasting in New Jersey from interference.

B. Protection to the 44 dBu Contour is Necessary to Protect New Jersey Stations from Harmful Interference

67. The Commission's FM translator rules currently provide for the protection of a station's existing listening area and not just its primary contour. Regardless of whether contour overlap will occur, an FM translator station application will not be accepted for filing if:

the predicted 1 mV/m field strength contour of the FM translator station will overlap a populated area already receiving a regularly used, off-the-air signal of any authorized co-channel, first, second

or third adjacent channel broadcast station ... and grant of the authorization will result in interference to the reception of such signal.⁶²

In granting this protection, it thereby recognizes that listenable service extends beyond the 60 dBu service contour. Adoption of the predicted 44 dBu F(50,50) contour as the protected contour for full power, commercial FM broadcast facilities, and the use of the 20 dB D/U ratio for the second adjacent channel is necessary to protect to the limit of a full power station's listenable service area.

68. Exhibits 8 and 9 present dramatic empirical evidence demonstrating that two representative New Jersey Class A broadcast stations have significant coverage well beyond their 15-mile, 60 dBu protected contours. WDHA-FM is a Class A station licensed to Dover, NJ. The following table summarizes listenership data for WDHA as a function of distance from its transmitter site.⁶³

Outside Protected Contour	Miles from signal	Listeners	% of Listeners
	0 - 15	86,200	39.85%
	15 - 25	79,800	36.89%
	25 - 35	32,900	15.21%
	35+	17,400	8.04%
	Total:	216,300	100.00%

⁶² Section 74.1204(f) of the Commission's rules. *See also* Section 74.1203(a) of the Commission's rules (defining interference as the impairment of "reception of a regularly used [broadcast] signal ... regardless of the quality of such reception").

⁶³ All audience data in Exhibits 8, 9, and 10 are conservative two-book averages (Fall/Spring), to eliminate spikes.

69. WHTG-FM is a Class A station licensed to Eatontown, NJ, with a transmitter site located approximately 4.6 miles from the Atlantic coast. The following table summarizes listenership data for WHTG.

	Miles from signal	Listeners	% of Listeners
	0 - 15	66,100	52.05%
Outside Protected Contour	15 - 25	18,900	14.88%
	25 - 35	17,300	13.62%
	35+	24,700	19.45%
	Total:	127,000	100.00%

70. Slightly more than 60% of WDHA-FM's listenership is located outside of its 60 dBu protected contour. Almost 48% of WHTG-FM's listeners are located outside of its 60 dBu protected contour. What is especially remarkable is that neither station operates at maximum facilities for its class. WDHA-FM operates at 73% of maximum and WHTG-FM at 71%. Moreover, WHTG-FM is located near the coast; thus, a substantial segment of the distant portion of its signal is over the unpopulated Atlantic Ocean.

71. Special notice should be taken of the number of listeners located more than 35 miles from the stations. A 44 dBu protected contour corresponds to a 58.7 km or 36.47 mile radius for a 6 dB Class A operating at maximum facilities. Thus, if the Commission adopts a 44 dBu protected contour as proposed herein, almost 8% of WDHA-FM's listeners will still lose broadcast service from the station. An astonishing 20% of WHTG-FM's listeners will lose service, even under a 44 dBu protected contour. NJBA emphasizes that objective criteria support the promulgation of a protected contour in New Jersey that is 34 or 40 dBu.

Recognizing the Commission's expressed desire to foster a low power FM service, however, and

taking into account the unique circumstances in New Jersey that would lead to severe loss of service, an appropriate place to strike the balance would be at the 44 dBu protected Contour.

72. Exhibit 10 demonstrates that Class B stations also furnish service far beyond their protected contours. WKXW-FM is a Class B station licensed to Trenton. The following table summarizes listenership for WKXW-FM.⁶⁴

Miles from signal	Listeners	% of Listeners
Inside protected contour (40.7 miles)	749,300	72.30%
Outside protected contour	287,100	27.70%

73. As was true of its Class A counterparts —WDHA-FM and WHTG-FM — WKXW-FM performs yeomanly service, bringing its signal to the New Jersey audience, far beyond its protected contour. Indeed, in the recent *Monmouth* proceedings, the Commission took into account WKXW-FM’s reach in New Jersey, furnishing 24-hour coverage of New Jersey news, traffic, weather and information.⁶⁵

74. WDHA-FM and WHTG-FM are striking examples of how New Jersey Class A stations are performing the function of Class B stations. Unless the protected contours of New Jersey stations are increased as proposed herein, many of the listeners of these stations — up to 60% for WDHA-FM and up to 48% for WHTG-FM — will lose broadcast service on the

⁶⁴ Because of the impracticality of estimating audience in counties that are bisected by the protected contour, WKXW treated corresponding county data as falling both inside and outside the contour. This should not have an appreciable effect on the relative percentages of audience.

⁶⁵ *Nassau Broadcasting II, LLC, Assignor and Millennium Shore License Holdco, LLC, Assignee For Consent to Assignment of Licenses of WADB(AM), Asbury Park, NJ, WJLK-FM, Asbury Park, NJ, and WBBO(FM), Ocean Acres, NJ, Seashore Broadcasting Corp., Assignor and Millennium Shore License Holdco, LLC, Assignee For Consent to Assignment of License of WOBN-FM, Toms River, NJ, North Shore Broadcasting Corp., Assignor and Millennium Shore License Holdco, LLC, Assignee For Consent to Assignment of License of WOBN(AM), Lakewood Township, New Jersey*, 17 FCC Rcd 9001 (2002).

stations' frequencies. WKXW-FM is a sterling example of how a Class B station is bringing local coverage far outside its protected contour. Indeed, it would be completely inconsistent with the Commission's findings in the *Monmouth* proceeding⁶⁶ to allow WKXW-FM's service area to be fragmented by interference from LPFM and translator stations. More significantly, no new voice will enter the broadcast environment to replace the service furnished by these stations. Much of the spectrum formerly occupied by full power FM stations — outside their protected contours — will be lost to interference.

75. Further support for adoption of a 44 dBu protected contour is found in Exhibit 11, "FM Stereo Receiver Performance with Low Signal Levels Co-channel and Second Adjacent Channel Interference" (the "Keller Summary").⁶⁷ The Keller Summary is a summary of relevant data from the *FM Receiver Interference Laboratory Test Report* (1999), prepared for National Public Radio, Consumer Electronic Association and the Corporation for Public Broadcasting, and from receiver characterization tests conducted for the National Radio Systems Committee ("NRSC"). Because of the difficulty of converting laboratory measurements to field measurements, the Keller Summary describes the reference point from which other data can be calibrated. The NRSC found that for a FM field strength of 60 dBu, the power level input was approximately -65 dBm. The field strength for other signal levels can then be determined by adding or subtracting the corresponding power level change in units of dB.

76. Table 1 of the Keller Summary shows the receiver RMS signal to noise ("S/N") ratios at seven signal levels. At the reference level of -65 dBm, S/N performance ranged from 54 to 66 dB. Receivers were then tested with progressively lower signal strengths, at 5 dB intervals.

⁶⁶ *Id.*

⁶⁷ Prepared by Tom Keller, April 6, 2004. Mr. Keller is a consultant to the Consumer Electronic Association.

These gradations correspond to comparable reductions to the predicted field strength in 5 dB increments. Thus a power level of -80 dBm (15 dB below the -65 dBm reference level) extrapolates to a corresponding field strength of 45 dBu (15 dB below the reference level of 60dBu). The study found that at the -80 dBm/45 dBu level, S/N performance was still reasonable, ranging from 41 to 67 dB.⁶⁸ Accordingly, the NJBA proposed 44 dBu protected contour is well supported by laboratory tests.⁶⁹

77. Both actual listenership data and the Keller Summary justify adoption of a 44 dBu protected contour for commercial FM stations in New Jersey. Because New Jersey has been shortchanged in the allotment of FM stations, adoption of an appropriately calibrated protection contour for FM stations allotted to New Jersey communities will prevent the further deterioration of service to the New Jersey FM audience.

78. In addition to justifying adoption of a 44 dBu protected contour, the Keller Summary definitively concludes that the current 20 dB co-channel protection ratio penalizes Class A stations and that a reduction in interference will improve the performance of all receivers equally. It likewise concludes that reducing the undesired interference limit from -40 dB to -20 dB for second adjacent channels will reduce interference on the majority of non-automobile radios. NJBA's proposal will prevent further erosion of reception in New Jersey.

79. The interference situation is also dramatically affected by the performance of today's radios. A rational policy cannot be implemented without first factoring radio performance into the equation. A basic proposition deriving from the laws of physics is that

⁶⁸ The S/N figures at the higher end of the range are probably attributable to the blending of the two stereo channels to mono.

⁶⁹ *See also* Petition for Rulemaking (RM-9395) of USA Digital Radio Partners to permit the introduction of digital audio broadcasting in the AM and FM services (defining the 44 dBu contour as the extent of listenable FM service for the average listener).

“Interference does not carry a nametag.” A radio receiver cannot distinguish between locally originated source of interference, e.g., LPFM stations, and a non-locally originated source, e.g., translator stations. A 100-watt translator will create the same interference as a LP100 and vice versa. The Commission’s rules, however, treat the two services as if receivers can distinguish between them. For example, the Commission’s LPFM spacing rules incorporate a 20-kilometer interference buffer, yet there is no such provision in the translator rules. The rules should be amended so as to require consistent separations from full power stations as proposed herein.

80. As discussed above, grant of LPFM and FM translator applications based upon the current spacing and second adjacent protection ratios will create a disastrous interference problem in New Jersey. Attached as Exhibit 12 is the Technical Report of Charles M. Anderson. Mr. Anderson’s report summarizes the analysis of interference that will be caused to licensed full service FM stations in New Jersey by proposed New Jersey FM translators that have either been accepted for filing or filed as singletons and are pending acceptance.⁷⁰

81. Mr. Anderson examined a total of 28 such applications and concluded that grant of 26 of the applications will cause interference with one or more full power New Jersey commercial FM stations based on the use of the 44 dBu (50,50) protected contour and the 20 dBu second-adjacent channel ratio.⁷¹ Fifteen of the 28 applications will cause interference to populations of 1,000 or more; 13 will cause interference to populations of 10,000 or more; and, most drastically, seven will create new interference to nine stations, affecting populations in

⁷⁰ Some of the translator applications currently filed with the Commission were filed by NJBA members in order to improve coverage. However, NJBA does not expect special treatment for applications filed by its members. Any translator applications currently before the Commission — including any filed by NJBA members — that do not meet the proposed protection criteria should be denied.

⁷¹ The analysis in Exhibit 12 is based on 44 dBu contours predicted from facilities as licensed.

excess of 100,000. The following eight applications represent the most egregious cases of interference out of 28 applications studied:

Proposed Translator	Station Receiving Interference	Interference Population	Interference Area (sq km)
BNPFT20030825AHK 252D Lakewood, NJ	WMGQ 252A E-1 New Brunswick, NJ	525,161	1,734
	WBBO 253A E-2 Ocean Acres, NJ	407,742	881
BNPFT20030828AAN 289D Trenton, NJ	WCHR-FM 289B E-3 Manahawkin, NJ	936,123 (769,563NJ)	1,575
BNPFT20030827AHH 290D Hackettstown, NJ	WCAA 290B1 E-4 Newark, NJ	349,199	1,102
BNPFT20030827AHA 276D Pompton Lakes, NJ	WPRB 277B E-5 Princeton, NJ	366,337	269
BNPFT20030827AGO Clinton, NJ	WOJZ 285B1 E-6 Egg Harbor, NJ	142,271	155
BNPFT20030827AFX 288D Atlantic Highlands, NJ	WDHA-FM 288A E-7 Dover, NJ	6,656,348 (941,065NJ)	1,770
	WCHR-FM 289B1 E-8 Manahawkin, NJ	190,655	453
BNPFT20030828ALY 248D West Milford, NJ	WPST 248B E-9 Trenton, NJ	797,661	675
BNPFT20030828ABC 272D New Gretna, NJ	WAIV 272A E-10 Cape May, NJ	104,311	765

The maps included as Attachments E-1 through E-10 to Exhibit 12 graphically portray the areas of interference. What is especially striking is that audience in the shaded areas will lose service to interference. For these listeners, another station will be stripped from the New Jersey FM dial.

82. In practice, many New Jersey FM stations will be vulnerable to interference from multiple translator stations. The maps in Exhibit 13 depict the interference that will be experienced by the three stations for which listenership data is presented in paragraphs 68 *et*

seq.: WDHA-FM, WHTG-FM, and WKXW-FM.⁷² The following chart summarizes the expected interference.

Station	Interference Population	Interference Area (sq km)
WDHA-FM	6,661,186	1,821.9
WHTG-FM	9,635,704	5,883.1
WKXW-FM	8,184,004	3,014.0

Based on these examples, it can be expected that interference from translators will severely encroach in several directions upon the demonstrated service areas of New Jersey stations.

83. Under Section 303(g) of the Communications Act, the Commission is tasked with the responsibility of “generally encourag[ing] the larger and more efficient use of radio in the public interest.”⁷³ Commission policy historically encouraged licensees to improve service by upgrading their facilities. For example:

- In 1984, the Commission adopted a policy to permit existing FM licensees to upgrade to a higher-class channel where there were no other expressions of interest for the channel or where at least one other channel of equivalent class was available in the community.⁷⁴

⁷² The maps of WDHA-FM and WKXW-FM are based on 44 dBu contours predicted from facilities as licensed. To give a more complete picture of how interference would affect under-powered Class A stations, if they had been licensed to operate as full Class A stations, the map of WHTG-FM employs a 44 dBu contour based on a maximum class facility.

⁷³ 47 U.S.C. Section 303(g).

⁷⁴ *Amendment of the Commission’s Rules Regarding the Modification of FM and Television Licenses*, 98 FCC 2d 916 (1984).

- Two years later, it adopted a policy permitting FM stations to upgrade class on a co or adjacent channel mutually exclusive with the licensee's existing channel without being subject to competing proposals.⁷⁵
- The Commission has allowed groups of broadcasters to upgrade where the change is necessitated by reception problems.⁷⁶
- The Commission permitted routine authorization of FM stations at nominally short-spaced transmitter locations as long as other stations are protected from interference.⁷⁷

In the same manner that the Commission's *Short-Spaced FM Proceeding* increased "the opportunity for new, enhanced or expanded service"⁷⁸ NJBA's proposal represents an opportunity for enhanced and expanded service and improved spectrum efficiency.

84. The implementation of a policy fostering the grant of inferior facilities, i.e., LPFM and translator stations, at the expense of, and without affording adequate protection to, existing local service, fails to serve the public interest in enhanced and expanded service and

⁷⁵ *Amendment of the Commission's Rules Regarding Modification of FM Broadcast Licenses to Higher Class Co-Channel or Adjacent Channels*, 60 RR 2d 144 (1986).

⁷⁶ *See Nighttime Power Limitations for Class IV Stations*, 55 RR 2d 1015 (1984) (authorizing across the board increases in nighttime power to 1000 watts for Class IV AM stations). *See also*, *Antenna Height Power Limits*, 53 RR 2d 1351 (1983) (allowing Puerto Rico Class A stations to increase antenna heights without corresponding power reductions due to coverage problems created by rugged uneven terrain).

⁷⁷ *Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas* ("Short-Spaced FM Proceeding"), 4 FCC Rcd 1681 (1989), recon granted in part, 6 FCC Rcd 5356 (1991).

⁷⁸ *Amendment of Part 73 of the Commission's Rules to permit short-spaced FM station assignments by using Directional Antennas Notice of Inquiry*, 2 FCC Rcd 3141, para. 6 (1987).

improved spectrum efficiency.⁷⁹ Grant of NJBA's proposal will serve the public interest in that it will permit the implementation of the Commission's plans and policy objections for non-interfering LPFM (and translator stations) while at the same time protecting the substantial investment licensees have made in their facilities in order to meet the reception expectations of their audiences and best serve the listening public and the public interest.

85. Historically, the Commission has sought out and implemented a means by which to ameliorate reception problems.⁸⁰ Likewise the Commission has long focused on ways in which to foster spectrum efficiency in the AM and FM radio bands.⁸¹ Grant of NJBA's proposal will be in the tradition of those actions. NJBA's proposal will enhance spectrum efficiency and check the New Jersey Anomaly while still allowing for the implementation of new service as contemplated by the Commission.

CONCLUSION

NJBA has demonstrated that FM broadcast stations are not fairly, efficiently or equitably allotted to New Jersey, contrary to the strictures of Section 307(b) of the Communications Act. Because higher powered stations have been unfairly and inequitably allotted to the neighboring states of New York and Pennsylvania, New Jersey relies disproportionately on underpowered

⁷⁹ *Docket 80-90, Memorandum Opinion and Order*, 97 FCC 2d 279, 285 (1984) ("stations operating with larger facilities are more 'efficient' from an engineering standpoint, than stations operating with inferior facilities").

⁸⁰ *See, e.g., Nighttime Power Limitations for Class IV Stations*, 55 RR 2d 1015 (1984) (authorizing Class IV stations to implement an across the board increase in nighttime power to 1000 watts to help overcome reception problems). *See also Antenna Height-Power Limits*, 53 RR 2d 1351 (1983) (Class A FM stations in Puerto Rico authorized to increase power to combat terrain induced coverage problems).

⁸¹ *See Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas*, 6 FCC Rcd 5356 (1991) (allowing the use of directional antennas to accommodate short spaced transmitter sites for existing stations).

Class A stations for local service. A consequence of this inequitable situation is that New Jersey stations are particularly vulnerable to encroaching interference.

NJBA's proposal offers the Commission a serious opportunity to, if not ameliorate inadequacies inherent to the FM service as it exists in New Jersey today, at least prevent substantial increase in interference to New Jersey's FM stations. In general, two ways exist to protect stations from interference. Additional interference can be avoided through parallel power increases, whereby affected stations increase power by the same level as interference from new sources, so that the current levels of interference are maintained. Alternatively, stations may be protected through grant of a higher level of protection.

NJBA proposes that the Commission pursue the latter course in this case as the most reasonable means by which to ensure localism, spectrum efficiency and the continued vitality of FM service in the state of New Jersey. Accordingly, NJBA proposes that the Commission amend its minimum distance separation rules such that FM translator and Low Power FM stations proposing to operate in New Jersey be required to provide protection to the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities, assuming maximum permitted facilities for each station, and the use of the 20 dB D/U ratio for the second adjacent channel, as the limit of a full service FM station's listenable service area. No LP10 or LP Translator applications should be accepted in New Jersey.

In order to ensure that resolution of the allocation issues raised in this Petition for Rulemaking will not be compromised, the Commission should impose an immediate freeze on the acceptance for filing and grant of any further applications for construction permits or licenses for LPFM or translator stations in the state of New Jersey pending the outcome of this rulemaking proceeding.

Adoption of NJBA's proposals will prevent the *AMization* (or the further AMization) of the FM band in the state of New Jersey. Left unchecked, the Commission's well meaning though misguided LPFM and translator policies will almost certainly lead to the same result to the FM band, i.e., multiple stations fighting for scarce spectrum in the state of New Jersey, dramatically increasing the New Jersey Anomaly, unless prompt and decisive preventative action is taken.

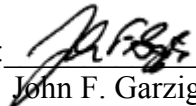
Wherefore, the premises considered, New Jersey Broadcasters Association respectfully requests that the Commission initiate a rulemaking proceeding looking toward the adoption of the proposals set forth herein.

Respectfully submitted,

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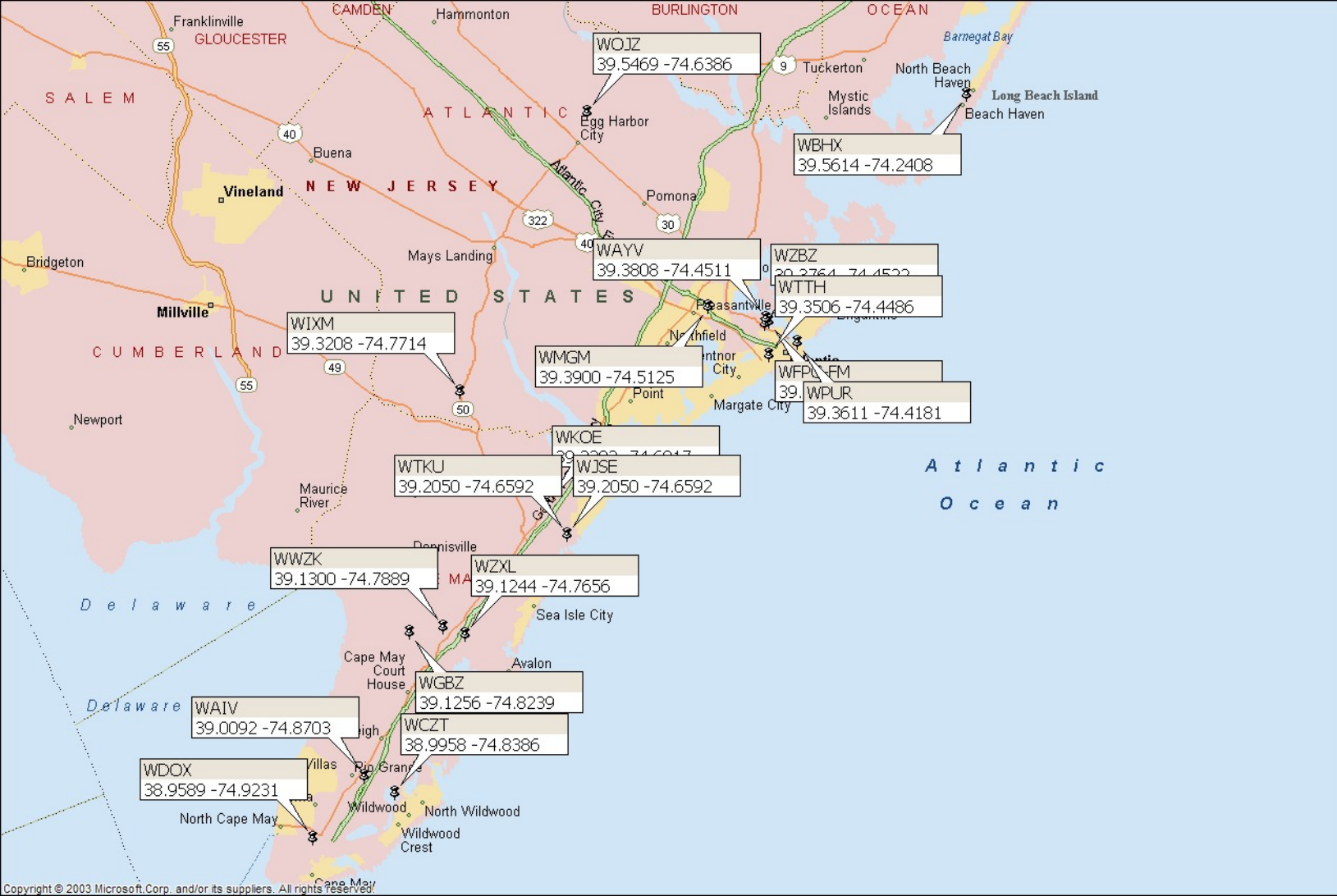
May 27, 2004

EXHIBIT 1

Distribution of FM Stations by State

State	Licensed FM Stations	Population	Population Per Station	Stations per 1 million population	Percentage of New Jersey
New Jersey	46	8,414,350	182,921	5.47	
Massachusetts	61	6,349,097	104,084	9.61	176%
Connecticut	32	3,045,565	95,174	10.51	192%
Maryland	58	5,296,486	91,319	10.95	200%
Rhode Island	12	1,048,319	87,360	11.45	209%
New York	250	18,976,457	75,906	13.17	241%
Delaware	12	783,600	65,300	15.31	280%
Ohio	199	11,353,140	57,051	17.53	321%
Pennsylvania	216	12,281,054	56,857	17.59	322%

EXHIBIT 2



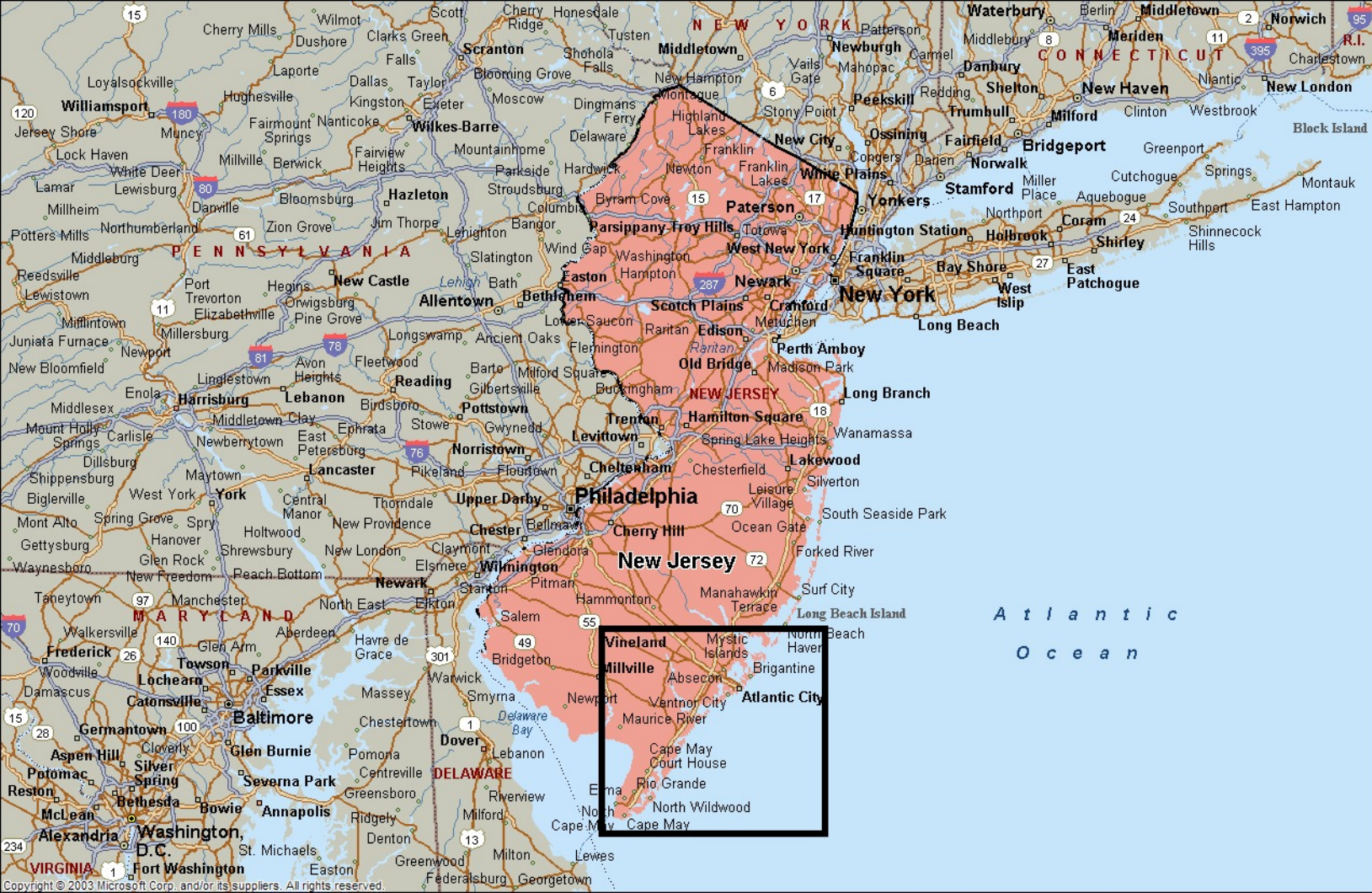


EXHIBIT 3

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Exhibit 3

NEW JERSEY COMMERCIAL BAND FM STATION COVERAGE AREAS AS A PERCENTAGE OF MAXIMUM CLASS FACILITIES

Station	Channel/ Class	Service Area (Sq-Km)	% Maximum Class	Area Over Water (Sq-Km)	% Maximum - Water
WDOX	294A	1,330	53	1080.8	9.9
WBHX	259A	806	32	551.8	10.1
WDTH	226A	1,455	58	1023.0	17.2
WAIV	272A	1,698	67	1234.2	18.4
WCZT	254A	2,556	100	1966.1	23.8
WZXL	264B	9,493	71	5982.5	26.4
WPUR	297B1	5,374	86	3582.8	28.5
WRAT	240A	1,687	67	963.3	28.8
WWZY	296A	2,448	98	1705.0	29.5
WZBZ	257A	1,867	74	1108.0	30.2
WAYV	236B	9,283	70	4910.2	32.8
WTTH	241A	2,121	84	1249.3	34.6
WJSE	274A	1,711	68	832.9	34.9
WWZK	232A	1,775	71	883.4	35.4
WGBZ	288A	1,755	70	857.0	35.7
WMGM	279B	10,492	79	5328.9	38.8
WOBMFM	224A	1,819	72	810.8	40.1
WFPGFM	245B	10,871	82	5508.4	40.2
WJRZFM	261A	1,826	73	798.9	40.8
WHTGFM	292A	1786	71	752.3	41.0
WKOE	292A	1,768	70	717.8	41.8
WTKU	252A	2,337	93	1223.6	44.3
WIXM	247B	12,877	97	6116.1	50.8
WCHRFM	289B1	5,468	87	2049.1	54.5
WBBO	253A	2,281	91	880.6	55.7
WJKS	269A CP	1824	73	383.6	57.2
WCAA	290B1	5,468	87	1025.2	71.0
WMGQ	252A	1,838	73	46.0	71.2
WJLKFM	232A	1,817	72	0.0	72.0
WSUS	272A	1,809	72	0.0	72.0
WDHAFM	288A	1831	73	0.0	73.0
WHCY	292A	1,894	75	0.0	75.0
WPATFM	226B	13,558	100	3350.7	76.7

WHTZ	262B	13,612	100	3298.6	77.5
WPST	248B	10,405	78	30.0	77.9
WOJZ	285B1	6,206	99	1235.4	79.2
WPRB	277B	11,441	86	300.9	83.7
WFME	234B	13,477	100	1932.5	86.7
WNNJFM	279B1	5,516	88	0.0	88.0
WSNJFM	300A CP	2,216	88	0.0	88.0
WTHK	233B	12,258	92	82.8	91.4
WAWZ	256B	13,062	98	855.2	91.7
WKXWFM	268B	13,535	100	705.7	96.4
WWYY	296A	2,469	98	0.0	98.0
WVLT	221A	2,531	100	0.0	100.0
WKDN	295B	13,239	100	0.0	100.0

This analysis reveals the degree to which New Jersey FM radio stations operate at less than maximum class facilities, particularly Class A stations. Twenty (20) of the twenty-seven (27) Class A stations operate with a coverage area that is less than 85% of the maximum for the class (2,516 sq km), and five of the fourteen Class B stations operate with less than 85% maximum class service area (13,314 sq km). The average coverage area for all stations is 81% of maximum class and 75% for Class A stations.

Many of the New Jersey stations are located near the ocean, and much of their coverage area is over water. Consequently, the average New Jersey station's percentage of maximum facility coverage area less the area over water is only 56%. Thirty-two of the stations have 75% or less, twenty-two stations 50% or less and eleven of the forty-six stations have 33% or less of maximum facilities.

This analysis is based on maximum class areas of 2,516 sq km for Class As (28.3 km 60 dBu), 6,277 sq km for Class B1s (57 dBu = 44.7 km) and 13,314 sq km for Class Bs (54 dBu = 65.1 km). Coverage areas for New Jersey commercial stations were calculated using V-Soft Communications INTERDLG program. The areas over water were determined by creating the

appropriate service contour with V-Soft Communications Probe III software and then defining the area over water using the Probe III polygon feature which also calculates area.

EXHIBIT 4

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EXHIBIT 4

PROPOSED LOW POWER FM SPACINGS

This exhibit summarizes the development of proposed new spacing requirements for low power FM facilities (LPFMS) based on the use of the 44 dBu (50,50) contour as the protected contour for full power, commercial FM broadcast facilities, and the use of the 20 dB D/U ratio for the second adjacent channel.

Distances to the maximum class 44 dBu contours for full power stations and for maximum facility LPFM100 facilities were determined utilizing the V-Soft Communications Contour program. The protected and interfering contours were then added and rounded to the nearest kilometer for each facility for co-channel, 1st adjacent, 2nd adjacent and 3rd adjacent channel separations.

<u>LP100</u>	<u>Co-channel</u>	<u>1st Adjacent</u>	<u>2nd Adjacent</u>	<u>3rd Adjacent</u>
Class A	118	80	63	60
Class B1	133	94	78	75
Class B	148	110	93	90

EXHIBIT 5

Exhibit 5

Amend Section 74.1204(a) to add new section 4:

(4) All class A, B1, and B commercial band FM stations licensed to New Jersey communities:

Frequency Separation	Interference contour of proposed translator station	Protected contour of commercial band New Jersey station
Co-channel	0.015 mV/m (24 dBu)	0.158 mV/m (44 dBu)
200 kHz	0.079 mV/m (38 dBu)	0.158 mV/m (44 dBu)
400 kHz	1.584 mV/m (64 dBu)	0.158 mV/m (44 dBu)
600 kHz	15.848 mV/m (84 dBu)	0.158 mV/m (44 dBu)

EXHIBIT 6

Charles M. Anderson and Associates

Broadcast Consultants
1519 Euclid Avenue
Bowling Green, KY 42103

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EXHIBIT 6

INTERFERENCE EFFECT OF LOW POWER FM STATIONS

The service and interference areas are listed below based on an assumption of uniform radius for each. All contours calculated with V-Soft CONTOUR program. Interference areas are calculated for the (50,10) interfering contours for the existing 60 dBu, 57 dBu (B1) and 54 dBu service contours for all stations. These relative areas illustrate the large area of spectrum space occupied by the interfering contours compared to the relatively small service areas.

LP100

	Class	Contour	Radius (km/mi)	Area (sq km/sq mi)	Interference to Service
Service	LP100	60 dBu (50,50)	5.6 (3.48)	99 (38.22)	N/A
Interference					
	A	40 dBu (50,10)	18.6 (11.56)	1,087 (419.69)	1098%
	B1	37 dBu (50,10)	22.4 (13.92)	1,576 (608.50)	1592%
	B	34 dBu (50,10)	26.8 (16.65)	2,256 (871.05)	2279%

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LP10

	Class	Contour	Radius (km/mi)	Area (sq km/sq mi)	Interference to Service
Service	LP10	60 dBu (50,50)	3.2 (19.88)	32 (12.36)	N/A
Interference					
	A	40 dBu (50,10)	10.2 (203.19)	327 (126.26)	1022%
	B1	37 dBu (50,10)	12 (280.86)	452 (174.52)	1413%
	B	34 dBu (50,10)	14.2 (393.95)	634 (244.79)	1982%

EXHIBIT 7

Exported report from MaximiSer V9.5 Programmers Package: Listening Location Trend Report
What is WKXW-FM's Listening Location Performance?""

Survey: Winter 2004 Pop: 1371656 Intab: 2090

Demo: Persons 12+
Daypart: M-Su 6:00AM - 12:00M 1 - 12
Geo: MIDDLESEX-SOMERSET-UNION METRO - Std

What is WKXW-FM's Cume Audience by Location?

Cume (00)

Car	1902
Home	893
Work	263
Away Other	66

What is WKXW-FM's % of Cume by Location?

% of Cume Audience

% Car	82
% Home	38
% Work	11
% Away Other	3

What is WKXW-FM's AQH Audience by Location?

AQH (00)

Car	62
Home	32
Work	13
Away Other	1

What is WKXW-FM's % of AQH by Location?

% of AQH Audience

% Car	57
% Home	30
% Work	12
% Away Other	1

EXHIBIT 8

Exported report from MaximiSer V9.0 MultiRanker Report Geo Area Report NEW YORK (Radio) - Fall 2003, Spring 2003

Areas: 0-15 - Home/Work Zip Grp Pop: 899300 Intab: 2275

Qualitative Selection: none

Demo: P 12+
Dayparts: 1
Stations: User Selected

☐ Area 1 - 0-15 - Cume Pers (00)
Ranked by: " (All Selected Stations)

Station	Daypart	Format	Weeks	Area 1	Area 1	Area 1	√
				0-15	0-15	0-15	Area 1
				AQH	AQH	AQH	Cume
				Rating	Share	Pers (00)	Pers (00)
WDHA-FM	M-Su 6:00AM - 12:00M	Album Oriented Rock	12-Jan	0.6	3.9	50	862

√ = Sort column/row "

0-15 - Home/Work Zip Grp: People who live or work in zipcodes 07004, 07005, 07006, 07009, 07034, 07035, 07039, 07041, 07044, 07045, 07046, 07052, 07054, 07058, 07068, 07078, 07082, 07403, 07405, 07420, 07424, 07438, 07439, 07440, 07442, 07444, 07457, 07460, 07470, 07474, 07512, 07801, 07802, 07803, 07806, 07821, 07828, 07834, 07836, 07837, 07843, 07845, 07847, 07849, 07850, 07852, 07856, 07857, 07866, 07869, 07871, 07874, 07876, 07885, 07901, 07902, 07920, 07922, 07924, 07926, 07927, 07928, 07930, 07932, 07933, 07934, 07935, 07936, 07938, 07939, 07940, 07945, 07946, 07950, 07960, 07962, 07963, 07970, 07974, 07976, 07980, 07981

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received five or more minutes of listening in at least 10 diaries in the market, Monday-Sunday 6am-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

Exported report from MaximiSer V9.0 MultiRanker Report Geo Area Report NEW YORK (Radio) - Fall 2003, Spring 2003

Areas: DHA 15-25 - Home Zip Grp Pop: 2514700 Intab: 4821

Qualitative Selection: none

Demo: P 12+

Dayparts: 1

Stations: User Selected

☐

Ranked by: " Area 1 - DHA 15-25 - Cume Pers (00) (All Selected Stations)

Station	Daypart	Format	Weeks	Area 1	Area 1	Area 1	√ Area 1
				DHA 15-25 AQH Rating	DHA 15-25 AQH Share	DHA 15-25 AQH Pers (00)	DHA 15-25 Cume Pers (00)
WDHA-FM	M-Su 6:00AM - 12:00M	Album Oriented Rock	12-Jan	0.2	1	44	798

Note: Custom zipcode group has been modified for current survey and/or ethnic demo selection.

√ = Sort column/row "

DHA 15-25 - Home Zip Grp: People who live in zipcodes 07002, 07003, 07008, 07011, 07012, 07013, 07016, 07017, 07018, 07023, 07026, 07027, 07028, 07029, 07031, 07032, 07033, 07036, 07040, 07042, 07043, 07050, 07055, 07057, 07059, 07060, 07061, 07062, 07063, 07065, 07066, 07069, 07070, 07071, 07072, 07073, 07074, 07075, 07076, 07079, 07080, 07081, 07083, 07088, 07090, 07091, 07092, 07094, 07103, 07104, 07105, 07106, 07107, 07108, 07109, 07110, 07111, 07112, 07114, 07201, 07202, 07203, 07204, 07205, 07206, 07207, 07208, 07304, 07305, 07306, 07307, 07401, 07407, 07410, 07416, 07417, 07418, 07419, 07421, 07422, 07423, 07430, 07432, 07436, 07446, 07450, 07452, 07456, 07458, 07461, 07462, 07463, 07480, 07481, 07501, 07502, 07503, 07504, 07505, 07506, 07508, 07513, 07514, 07522, 07524, 07601, 07603, 07604, 07607, 07630, 07642, 07643, 07644, 07646, 07649, 07652, 07660, 07661, 07663, 07666, 07675, 07677, 07822, 07826, 07838, 07840, 07846, 07848, 07853, 07860, 07865, 07875, 07877, 07921, 07931, 07977, 08805, 08807, 08812, 08820, 08830, 08833, 08835, 08836, 08840, 08846, 08854, 08858, 08869, 08876, 08889

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

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limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

Exported report from MaximiSer V9.0 MultiRanker Report Geo Area Report NEW YORK (Radio) - Fall 2003, Spring 2003

Areas: DHA 25-35 - Home/Work Zip Grp Pop: 1178400 Intab: 2665

Qualitative Selection: none

Demo: P 12+
 # Dayparts: 1
 Stations: User Selected
☐
 Ranked by: " Area 1 - DHA 25-35 - Cume Pers (00) (All Selected Stations)

Station	Daypart	Format	Weeks	Area 1	Area 1	Area 1	Area 1
				DHA 25-35	DHA 25-35	DHA 25-35	DHA 25-35
				AQH	AQH	AQH	Cume
				Rating	Share	Pers (00)	Pers (00)
WDHA-FM	M-Su 6:00AM - 12:00M	Album Oriented Rock	12-Jan	0.1	0.7	14	329

√ = Sort column/row

DHA 25-35 - Home/Work Zip Grp: People who live or work in zipcodes 07010, 07020, 07022, 07024, 07030, 07047, 07064, 07086, 07087, 07093, 07095, 07302, 07310, 07605, 07620, 07621, 07624, 07626, 07627, 07628, 07631, 07632, 07641, 07645, 07648, 07650, 07656, 07657, 07670, 07676, 07721, 07735, 07823, 07825, 07827, 07832, 07833, 07844, 07863, 07881, 07882, 08502, 08558, 08801, 08802, 08809, 08816, 08817, 08822, 08823, 08824, 08826, 08827, 08829, 08832, 08837, 08844, 08850, 08852, 08853, 08857, 08859, 08861, 08862, 08863, 08867, 08868, 08872, 08873, 08879, 08882, 08884, 08885, 08901, 08902, 08903, 08904, 08906

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

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Exported report from MaximiSer V9.0 MultiRanker Report Demographic Report
NEW YORK (Radio) - Fall 2003, Spring 2003

Demos: P 12+ Pop: 1383400 Intab: 5181

Qualitative Selection: none

Geo Area: DHA 35-75 - Home/Work Zip Grp
Dayparts: 1
Stations: User Selected
Ranked by: P 12+ - Cume Pers (00) (All Selected Stations)

					P 12+	P 12+	P 12+	√ P 12+
Station	Daypart	Format	Weeks	AQH Rating	AQH Share	AQH Pers (00)	Cume Pers (00)	
WDHA-FM	M-Su 6:00AM - 12:00M	Album Oriented Rock	12-Jan	0	0.2	4	174	

√ = Sort column/row "

DHA 35-75 - Home/Work Zip Grp: People who live or work in zipcodes 07701, 07702, 07703, 07704, 07709, 07711, 07712, 07716, 07717, 07718, 07719, 07720, 07722, 07723, 07724, 07726, 07727, 07728, 07730, 07731, 07732, 07733, 07734, 07737, 07738, 07739, 07740, 07746, 07747, 07748, 07750, 07751, 07752, 07753, 07754, 07755, 07756, 07757, 07758, 07760, 07762, 07764, 08002, 08010, 08016, 08053, 08054, 08055, 08057, 08060, 08077, 08103, 08104, 08501, 08505, 08510, 08511, 08512, 08514, 08520, 08525, 08527, 08528, 08530, 08533, 08534, 08536, 08540, 08541, 08542, 08543, 08544, 08550, 08551, 08555, 08560, 08561, 08607, 08608, 08609, 08610, 08611, 08618, 08619, 08620, 08625, 08628, 08629, 08638, 08640, 08641, 08646, 08648, 08650, 08666, 08690, 08691, 08695, 08701, 08720, 08721, 08722, 08723, 08724, 08730, 08731, 08732, 08733, 08734, 08735, 08736, 08739, 08740, 08741, 08742, 08750, 08751, 08752, 08753, 08754, 08755, 08757, 08759, 08803, 08804, 08810, 08828, 08831, 08848, 08865, 08886, 08989

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

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EXHIBIT 9

Exported report from MaximiSer V10.0 MultiRanker Report Geo Area
NEW YORK (Radio) - Fall 2003 Spring 2003"

Areas: NY TSA -MMO - Cnty Grp Pop: 10960400 Intab: 17004

Qualitative Selection: none

Demo: P 12+

Dayparts: 1

Stations: User Selected

Ranked by: Area 1 - NY TSA -MMO - AQH Share (All Selected Stations)

Rank	Station	Daypart	Format	Weeks	Area 1	√	Area 1	Area 1	Area 1	Area 1
					NY TSA -MMO	Area 1	NY TSA -MMO	NY TSA -MMO	NY TSA -MMO	NY TSA -MMO
					AQH	AQH	AQH	AQH	Cume	Cume
					Rating	Share	Pers (00)	Pers (00)	Rating	Pers (00)
	WHTG-FM	M-Su	6:(Alternative	12-Jan	0	0	8		0.2	247

√ = Sort column/row "

NY TSA -MMO - Cnty Grp: BERGEN HDHA, NJ; BERGEN BALANCE, NJ; ESSEX HDBA, NJ; ESSEX HDHA, NJ; ESSEX BALANCE, NJ; HUDSON HDBA, NJ; HUDSON HDHA, NJ; HUDSON BALANCE, NJ; HUNTERDON, NJ; MERCER HDBA, NJ; MERCER HDHA, NJ; MERCER BALANCE, NJ; MORRIS, NJ; OCEAN SOUTH, NJ; PASSAIC HDHA, NJ; PASSAIC BALANCE, NJ; SOMERSET, NJ; SUSSEX, NJ; UNION HDBA, NJ; UNION HDHA, NJ; UNION BALANCE, NJ; WARREN, NJ; BRONX HDBA, NY; BRONX HDHA, NY; KINGS HDBA, NY; KINGS HDHA, NY; KINGS BALANCE, NY; NEW YORK HDBA, NY; NEW YORK HDHA, NY; NEW YORK BALANCE, NY; QUEENS HDBA, NY; QUEENS HDHA, NY; QUEENS BALANCE, NY; RICHMOND, NY

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received credit for five or more minutes of listening in at least 10 in-tab diaries in the survey area, Monday-Sunday Midnight-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

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Exported report from Maximizer V10.0 MultiRanker Report Geo Area
 NEW YORK (Radio) - Fall 2003 Spring 2003"

Areas: 15-25 MI - Home Zip Grp Pop: 310200 Intab: 940

Qualitative Selection: none

Demo: P 12+
 # Dayparts: 1
 Stations: User Selected
 Ranked by: Area 1 - 15-25 MI - AQH Share (All Selected Stations)

Rank	Station	Daypart	Format	Weeks	Area 1	Area 1	Area 1	Area 1	Area 1
					15-25 MI	15-25 MI	15-25 MI	15-25 MI	15-25 MI
					AQH	AQH	AQH	Cume	Cume
					Rating	Share	Pers (00)	Rating	Pers (00)
	WHTG-FM	M-Su	6:(Alternative	12-Jan	0.2	1.3	6	6.1	189

√ = Sort column/row "

15-25 MI - Home Zip Grp: People who live in zipcodes 07726, 07731, 08701, 08723, 08724, 08742, 08831, 08857, 08879, 08882, 08884

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received credit for five or more minutes of listening in at least 10 in-tab diaries in the survey area, Monday-Sunday Midnight-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

Areas: 25-35 CONTOUR - Home Zip Grp Pop: 457700 Intab: 1638

Qualitative Selection: none

Demo: P 12+
Dayparts: 1
Stations: User Selected
Ranked by: Area 1 - 25-35 CONTOUR - AQH Share (All Selected Stations)

Rank	Station	Daypart	Format	Weeks	Area 1	√ Area 1	Area 1	Area 1	Area 1
					25-35 CONTOUR AQH Rating	25-35 CONTOUR AQH Share	25-35 CONTOUR AQH Pers (00)	25-35 CONTOUR Cume Rating	25-35 CONTOUR Cume Pers (00)
	WHTG-FM	M-Su	6:(Alternative	12-Jan	0.2	1	7	3.8	173

√ = Sort column/row "

25-35 CONTOUR - Home Zip Grp: People who live in zipcodes 07065, 07066, 08512, 08520, 08527, 08528, 08536, 08540, 08550, 08561, 08733, 08735, 08751, 08752, 08753, 08757, 08810, 08824, 08830, 08840, 08846, 08854, 08863, 08901, 08902, 08904

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received credit for five or more minutes of listening in at least 10 in-tab diaries in the survey area, Monday-Sunday Midnight-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

Exported report from Maximi\$er V10.0 MultiRanker Report Geo Area
NEW YORK (Radio) - Fall 2003 Spring 2003"

Areas: NEW YORK TSA - Std Pop: 18596300 Intab: 43644

Qualitative Selection: none

Demo: P 12+
Dayparts: 1
Stations: User Selected
Ranked by: Area 1 - NEW YORK TSA - AQH Share (All Selected Stations)

Rank	Station	Daypart	Format	Weeks	Area 1 NEW YORK TSA AQH Rating	Area 1 NEW YORK TSA AQH Share	Area 1 NEW YORK TSA AQH Pers (00)	Area 1 NEW YORK TSA Cume Rating	Area 1 NEW YORK TSA Cume Pers (00)
	WHTG-FM	M-Su 6:00AM - 12:00M	Alternative	12-Jan	0	0.2	48	0.7	1270

√ = Sort column/row "

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received credit for five or more minutes of listening in at least 10 in-tab diaries in the survey area, Monday-Sunday Midnight-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

EXHIBIT 10

Exported report from MaximiSer V9.0 MultiRanker Report Demographic Report
NEW YORK-PHILADELPHIA SPCL COMBO (Radio) - Fall 2003, Spring 2003

Demos: P 12+ Pop: 8569500 Intab: 23262

Qualitative Selection: none

Geo Area: KXW 54 DBU CTYS - Cnty Grp
Dayparts: 1
Stations: User Selected
Ranked by: Station (All Selected Stations)

Station	Daypart	Format	Weeks	Cume Pers (00)
WKXW-FM	M-Su 12:00M - 12:00M	Talk/Personality	12-Jan	7493

KXW 54 DBU CTYS - Cnty Grp: BURLINGTON HDBA, NJ; BURLINGTON BALANCE, NJ; CAMDEN HDBA, NJ; CAMDEN HDHA, NJ; CAMDEN BALANCE, NJ; ESSEX HDBA, NJ; ESSEX HDHA, NJ; ESSEX BALANCE, NJ; GLOUCESTER, NJ; HUNTERDON, NJ; MERCER HDBA, NJ; MERCER HDHA, NJ; MERCER BALANCE, NJ; MIDDLESEX HDHA, NJ; MIDDLESEX BALANCE, NJ; MONMOUTH, NJ; MORRIS, NJ; OCEAN NORTH, NJ; OCEAN SOUTH, NJ; SOMERSET, NJ; UNION HDBA, NJ; UNION HDHA, NJ; UNION BALANCE, NJ; BUCKS, PA; CHESTER, PA; DELAWARE HDBA, PA; DELAWARE BALANCE, PA; LEHIGH, PA; MONTGOMERY, PA; NORTHAMPTON, PA; PHILADELPHIA HDBA, PA; PHILADELPHIA HDHA, PA; PHILADELPHIA BALANCE, PA

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received five or more minutes of listening in at least 10 diaries in the market, Monday-Sunday 6am-Midnight, during the survey period

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Exported report from MaximiSer V9.0 MultiRanker Report Demographic Report
NEW YORK-PHILADELPHIA SPCL COMBO (Radio) - Fall 2003, Spring 2003

Demos: P 12+ Pop: 20640100 Intab: 46943

Qualitative Selectio none

Geo Area: KXW DBU BORDER+ - Cnty Grp
Dayparts: 1
Stations: User Selected
Ranked by: Station (All Selected Stations)

Station	Daypart	Format	Weeks	Cume Pers (00)
WKXW-FM	M-Su 12:00M - 12:00M	Talk/Personality	12-Jan	2871

KXW DBU BORDER+ - Cnty Grp: FAIRFIELD (D SPLIT), CT; FAIRFIELD BR-SP HDBA, CT; FAIRFIELD BR-SP HDHA, CT; FAIRFIELD BR-SP BAL, CT; FAIRFIELD SN-SP HDHA, CT; FAIRFIELD SN-SP BAL, CT; KENT, DE; NEW CASTLE HDBA, DE; NEW CASTLE BALANCE, DE; ATLANTIC WEST, NJ; ATLANTIC EAST HDBA, NJ; ATLANTIC EAST BAL, NJ; ATLANTIC AC-SPLIT, NJ; BERGEN HDHA, NJ; BERGEN BALANCE, NJ; CAMDEN HDBA, NJ; CAMDEN HDHA, NJ; CAMDEN BALANCE, NJ; CAPE MAY, NJ; CUMBERLAND, NJ; ESSEX HDBA, NJ; ESSEX HDHA, NJ; ESSEX BALANCE, NJ; GLOUCESTER, NJ; HUDSON HDBA, NJ; HUDSON HDHA, NJ; HUDSON BALANCE, NJ; MORRIS, NJ; PASSAIC HDHA, NJ; PASSAIC BALANCE, NJ; SALEM, NJ; SUSSEX, NJ; WARREN, NJ; BRONX HDBA, NY; BRONX HDHA, NY; BRONX BALANCE, NY; DUTCHESS, NY; KINGS HDBA, NY; KINGS HDHA, NY; KINGS BALANCE, NY; NASSAU HDBA, NY; NASSAU HDHA, NY; NASSAU BALANCE, NY; NEW YORK HDBA, NY; NEW YORK HDHA, NY; NEW YORK BALANCE, NY; ORANGE HDHA, NY; ORANGE BALANCE, NY; PUTNAM, NY; QUEENS HDBA, NY; QUEENS HDHA, NY; QUEENS BALANCE, NY; RICHMOND, NY; ROCKLAND HDBA, NY; ROCKLAND BALANCE, NY; SUFFOLK EAST, NY; SUFFOLK CENT W HDHA, NY; SUFFOLK CENT W BAL, NY; SUFFOLK CENTRAL E, NY; SUFFOLK WEST HDBA, NY; SUFF WESTCHESTER HDBA, NY; WESTCHESTER HDHA, NY; WESTCHESTER BALANCE, NY; BERKS, PA; BUCKS, PA; CHESTER, PA; DELAWARE HDBA, PA; DELAWARE BALANCE, PA; LEHIGH, PA; MONROE, PA; MONTGOMERY, PA; NORTHAMPTON, PA; PHILADELPHIA HDBA, PA; PHILADELPHIA HDHA, PA; PHILADELPHIA BALANCE, PA; PIKE, PA

Please note: The intab reported is for the full twelve weeks of the survey. Users should note that reports run on fewer than twelve weeks are based on smaller sample sizes.

Stations qualify to be reported if they have received five or more minutes of listening in at least 10 diaries in the market, Monday-Sunday 6am-Midnight, during the survey period

Estimates are derived from the diaries that provided the audience data for the Market Report and are subject to the limitations stated in that Report. Due to these limitations, inherent in Arbitron's methodology, the accuracy of Arbitron audience estimates cannot be determined to any precise mathematical value or definition. This service is not part of Arbitron's regular syndicated service. The Media Rating Council (MRC) accredits this service.

EXHIBIT 11

FM Stereo Receiver Performance with Low Signal Levels Co-channel and Second Adjacent Interference

April 6, 2004

Introduction

Over the last 10 years the National Radio Systems Committee and the CEA have been conducting FM stereo receiver tests for FM-to-FM interference and IBOC compatibility. The data used for this report is taken from the NPR, CEA and CPB FM Receiver Interference Laboratory Test Report (1999) and from receiver characterization test conducted for the NRSC by CEA.

Receiver Sensitivity

Table 1 shows the laboratory RMS signal-to-noise ratios measured in dB at seven signal levels in dBm (50 ohms). The test transmitters operated with stereo pilot. Receiver noise measurements were made using the left channel and a 19 kHz notch filter.

For the IBOC field tests NRSC found that for a FM field strength of 60 dbu, the power level at the input of an automobile radio was approximately -65 dBm. The FM receiver's receiving antenna for this test was a $\frac{1}{4}$ wave vertical at about 10 feet above ground.

To reduce noise and audible sounds caused by multipath, the auto radios blend to mono at lower signal levels. The shaded areas on Table 1 are levels where the receiver stereo separation was reduced to 10 dB or less. Auto receiver #5 was in mono for the signal levels tested.

With the signal reduced by 15 dB below the 60 dbu, the S/N performance is reasonable. The S/N data for each receiver at the lower signal power level is shown in the -80 dBm and -85 dBm data columns in Table 1.

Receiver Sensitivity Conclusions

- With no interference the lower signal levels will produce a good sounding signal.
- To reduce the affects of MP some of the auto receivers will be in mono at the lower signal levels.

Co-Channel

Figures 1 and 2 show the laboratory measured WQP signal-to-noise ratio test results for 16 receivers, #1 through #16 in Table 1. The second adjacent WQP S/N data is not available for receivers #17 and #18.

Figure 1 shows the S/N with the desired signal 20 dB stronger than the undesired (D/U 20 dB, FCC limit). With the exception of receiver #1 the signal-to-noise for all receivers

varies from 26.5 dB to 17.5 dB, a spread of 9 dB. This S/N is below acceptable broadcast limits.

Figure 2 shows the same 16 receivers S/N test results with the desired to undesired (D/U) ratio set at 30 dB (desired 10 dB higher). With the reduction in interference the S/N has improved by 10 dB across the board.

Co-Channel Conclusions

- The present FCC 20 dB co-channel protection ratio penalizes class A stations.
- A reduction in interference will improve the performance of all receivers equally.

Second Adjacent Interference

Figures 3 and 4 show the 2nd adjacent laboratory measured WQP signal-to-noise ratio tests results for receivers #1 through #16.

Figure 3 shows the undesired signal 20 dB stronger than the desired (D/U -20 dB). Receiver #3 (boom box) and #16 (portable) have interference.

For Figure 2 the undesired signal was increased 20 dB to a D/U ratio of -40 dB. Receivers #3 (boom box), #9 (walkman), #11 (bookshelf/portable), and #16 (portable) failed completely. Receivers #4 (HiFi) and #12 (boom box) had some interference.

The auto radios #1, #5, #7, #13 and #15 showed little change in interference with the undesired 40 dB above the desired. In tests conducted by the NRSC, most automobile radios lost stereo separation when any undesired adjacent signal exceeded 30 dB.

Second Adjacent Conclusions

- Reducing the undesired interference FCC limit from -40 dB to -20 dB will reduce interference on the majority of non-automobile radios.

Note: Signal-to-Noise Measurements

RMS and Weighted Quasi Peak were used in this report. It is the convention to use RMS S/N measurements for consumer radio and in broadcast station testing. WQP measurements are used for making interference measurements for FCC filings. WQP is an international measurement standard. WQP S/N measurements do differ from RMS and are generally, but not always, 6 dB to 10 dB lower than RMS.

Thomas B. Keller

S/N at Seven Signal Levels
Table 1.

Consumer FM Stereo Receiver Data				S/N in dB							
Receiver Make	Receiver Type	Model Number	Estimated Age	Power -65dBm	Power -70dBm	Power -75dBm	Power -80dBm	Power -85dBm	Power -90dBm	Power -95dBm	
1 Delco	Auto (OEM)	16192463	9	60	59	57	55	55	55	55	
2 Denon	HiFi (RBDS)	TU-380RD	9	61	56	51	46	41	36	Mute	
3 Panasonic	Boom Box	RX-FS430	9	62	58	53	48	43	38	33	
4 Pioneer	HiFi (competitive)	SX-210	9	60	60	55	50	67	62	57	
5 Ford	Auto (OEM)	F4XF-19B132-CB	9	66	66	65	64	61	58	54	
6 Denon	HiFi (NAB)	TU-680	8	66	62	56	52	47	42	Mute	
7 Audiovox	Auto (aftermarket)	Av-220	9	58	56	53	51	51	51	58	
8 Sony	HiFi (competitive)	STR-AV21	12	65	60	55	50	45	63	57	
9 Sony	Walkman	SRF-M40W	12	57	54	50	45	40	35	59	
10 Technics	HiFi (competitive)	SA-EX110	5	65	60	55	51	46	41	57	
11 Sanyo	Bookshelf/portable	MCD-S736	5	54	50	46	41	36	31	32	
12 Sony	TR/Boom Box	CFD-S33	5	57	54	50	46	41	36	42	
13 Koss	Auto (aftermarket)	MS-457	5	57	53	48	44	39	34	29	
14 Magnavox	Bookshelf/Port	AX2700/17	5	54	50	48	48	52	49	45	
15 Ford	Auto (OEM)	XF3F	5	55	53	52	54	55	51	47	
16 Radio Shack	Portable	SCR-64 14-704	5	58	55	51	47	41	36	38	
17 Delphi	Auto (OEM)	09394139	3	60	59	61	64	63	60	56	
18 Pioneer	Auto (aftermarket)	KEH-1700	3	60	58	60	62	62	60	57	

- Table shows the receiver RMS S/N in dB at seven signal levels.
- The shaded areas on the table are for signal levels where the stereo separation was 10 dB or less.
- The data for receivers #1 through #16 was taken from the CEA 1999 FM Receiver Interference Laboratory Test Report.
- The data for receivers #17 and #18 was taken from the NRSC FM IBOC compatibility receiver characterization tests.

Co-Channel

Figure 1.

Co-Channel Audio S/N with 20 dB D/U

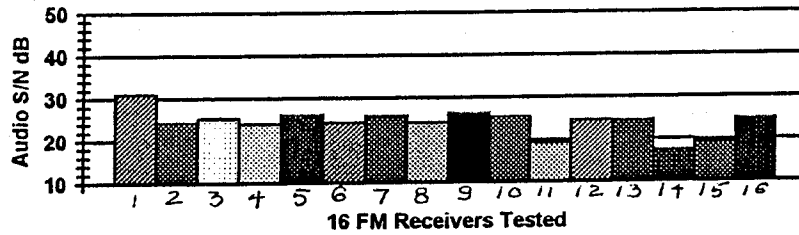
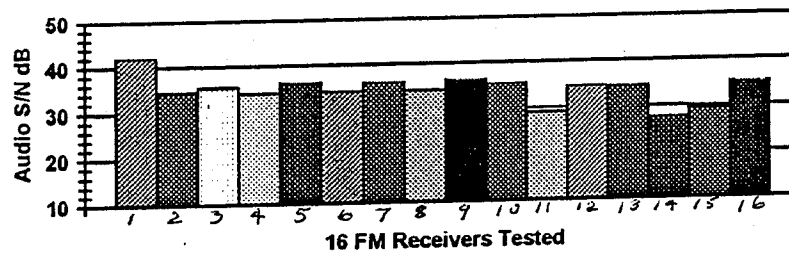


Figure 2.

C-Channel Audio S/N with 30 dB D/U



2nd Adjacent

Figure 3.

2nd Adjacent Audio S/N with D/U of -20 dB

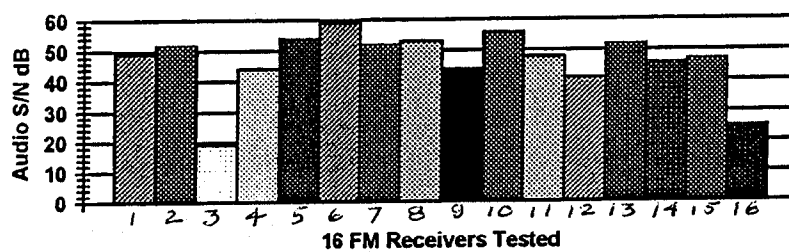


Figure 4.

2nd Adjacent Audio S/N with D/U of -40 dB

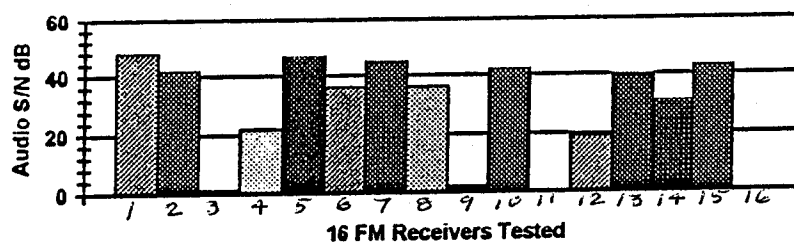


EXHIBIT 11

Charles M. Anderson and Associates

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Bowling Green, KY 42103

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Cell 270-535-4432

TECHNICAL REPORT

This ***Technical Report*** summarizes the analyses of interference caused to licensed full service FM stations in New Jersey by proposed New Jersey FM translators that have been either accepted for filing or filed as singletons and are pending acceptance.

Interference Criteria and Methodology:

The analyses utilized Commission interference ratios with the exception of the second adjacent channel where a 20 dB ratio was utilized rather than the 40 dB ratio currently specified in the Commission's rules. The analyses also assumed that the protected service contour for all New Jersey commercial FM stations is the 44 dBu (50, 50) contour.

The studies were conducted using V-Soft Communications' Probe III software and the V-Soft 30 second digitized terrain database. Population data is based on the 2000 U.S. Census. Interference from translators to full service stations was evaluated within each .1 km cell inside the stations' 44 dBu (50, 50) contour. Probe III analyzes the protected and interfering signals within each cell taking into consideration the HAAT and power for each in that direction and the appropriate D/U ratio.

Summary of Results:

A total of twenty eight (28) translator applications were analyzed. Twenty-six (26) applications create interference within one or more full power New Jersey

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commercial FM stations' 44 dBu contours. Fifteen (15) of the twenty-eight cause interference to a population of 1000 or more; thirteen (13) cause interference to a population of 10,000 or more and eight (8) of the twenty-eight cause interference to a population of 100,000 or more. The most egregious offenders (100,000+ population receiving interference) are summarized below. Exhibits are attached as E-1 through E-10.

Proposed Translator	Station Receiving Interference	Interference Population	Interference Area sq km
BNPFT20030825AHK 252D Lakewood, NJ	WMGQ 252A E-1 New Brunswick, NJ	525,161	1,734
	WBBO 253A E-2 Ocean Acres, NJ	407,742	881
BNPFT20030828AAN 289D Trenton, NJ	WCHR-FM 289B E-3 Manahawkin, NJ	936,123 (769,563NJ)	1,575
BNPFT20030827AHH 290D Hackettstown, NJ	WCAA 290B1 E-4 Newark, NJ	349,199	1,102
BNPFT20030827AHA 276D Pompton Lakes, NJ	WPRB 277B E-5 Princeton, NJ	366,337	269
BNPFT20030827AGO Clinton, NJ	WOJZ 285B1 E-6 Egg Harbor, NJ	142,271	155
BNPFT20030827AFX 288D Atlantic Highlands, NJ	WDHA-FM 288A E-7 Dover, NJ	6,656,348 941,065NJ	1,770
	WCHR-FM 289B1 E-8 Manahawkin, NJ	190,655	453
BNPFT20030828ALY 248D West Milford, NJ	WPST 248B E-9 Trenton, NJ	797,661	675
BNPFT20030828ABC 272D New Gretna, NJ	WAIV 272A E-10 Cape May, NJ	104,311	765

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Conclusion:

Based on the use of the 44 dBu (50,50) protected contour and the 20 dBu 2nd adjacent channel interference ratio, twenty-six of the twenty-eight translators cause interference. The sum total of the population receiving interference from these twenty-eight translators is 10,631,597. The great majority of this interference is co-channel or 1st adjacent channel. Eight of the proposed translators cause interference to a population of 100,000 or greater, six to a population of 300,000 or greater and one to a population of 6,656,348.

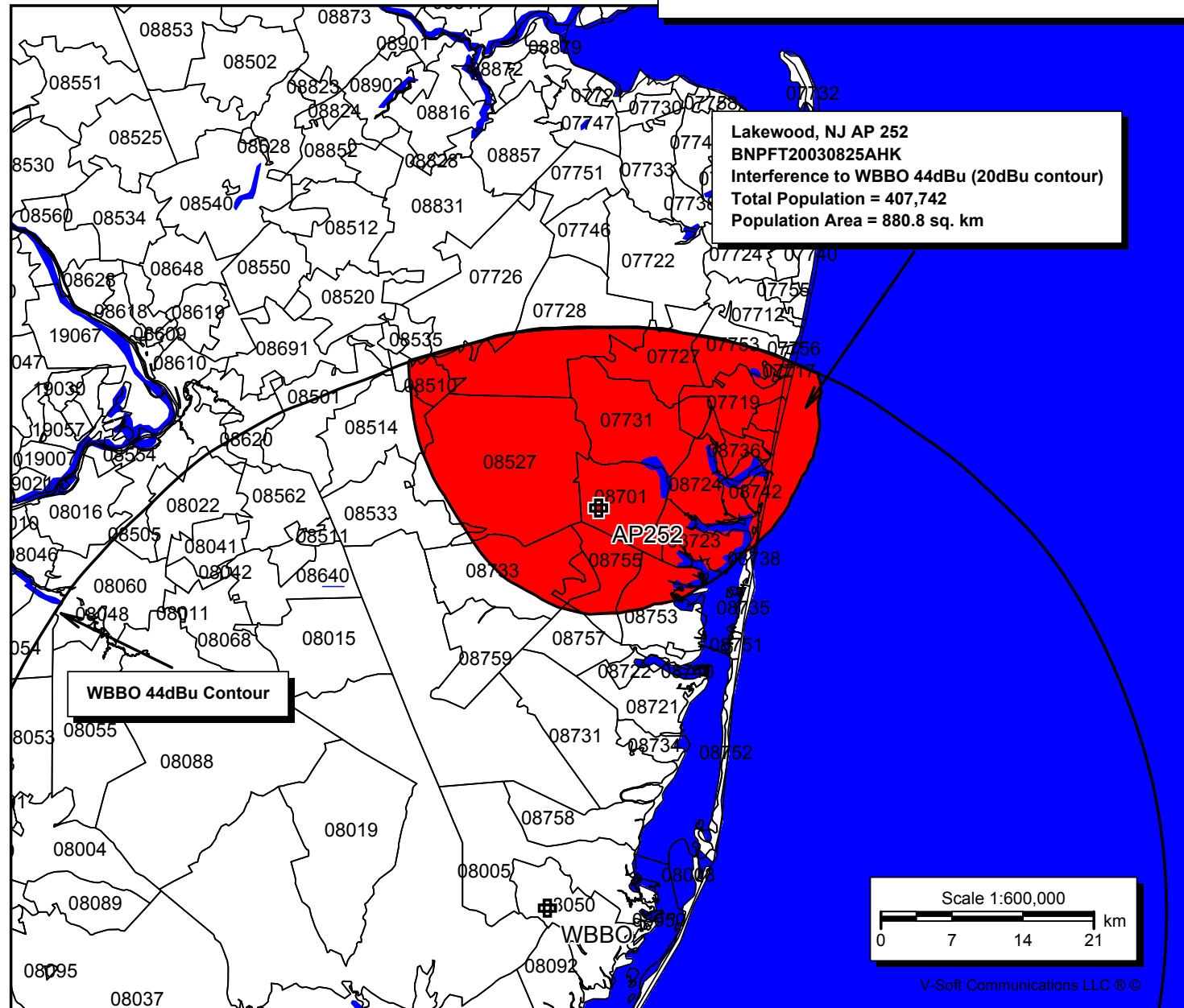


Charles M. Anderson April 28, 2004

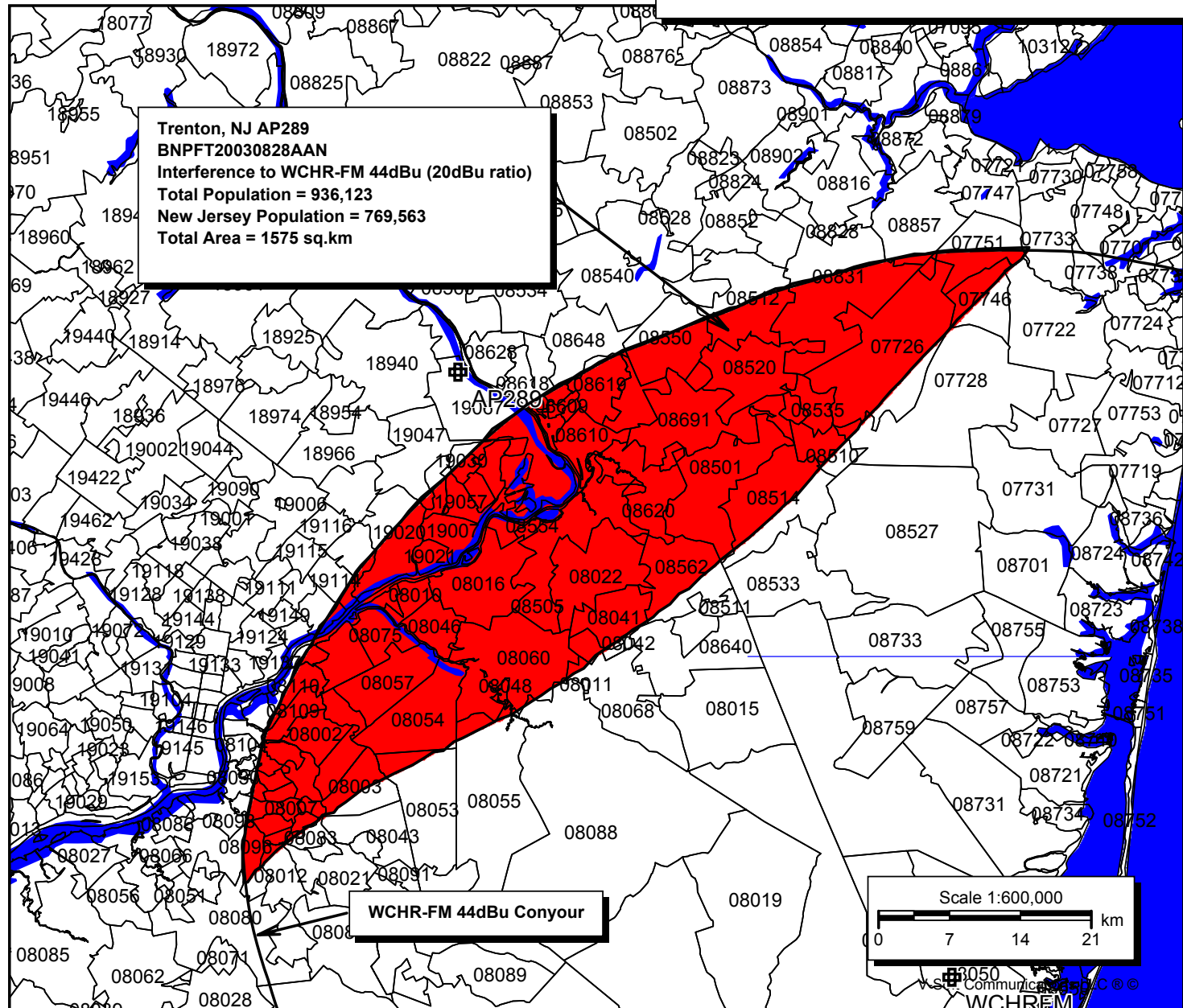
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CHARLES M. ANDERSON AND ASSOCIATES

E-2 WBBO
BLH20010720ABR
Latitude: 39-42-56 N
Longitude: 074-17-32 W
ERP: 2.95 kW
Channel: 253
Frequency: 98.5 MHz
AMSL Height: 160.0 m
Elevation: 18.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%

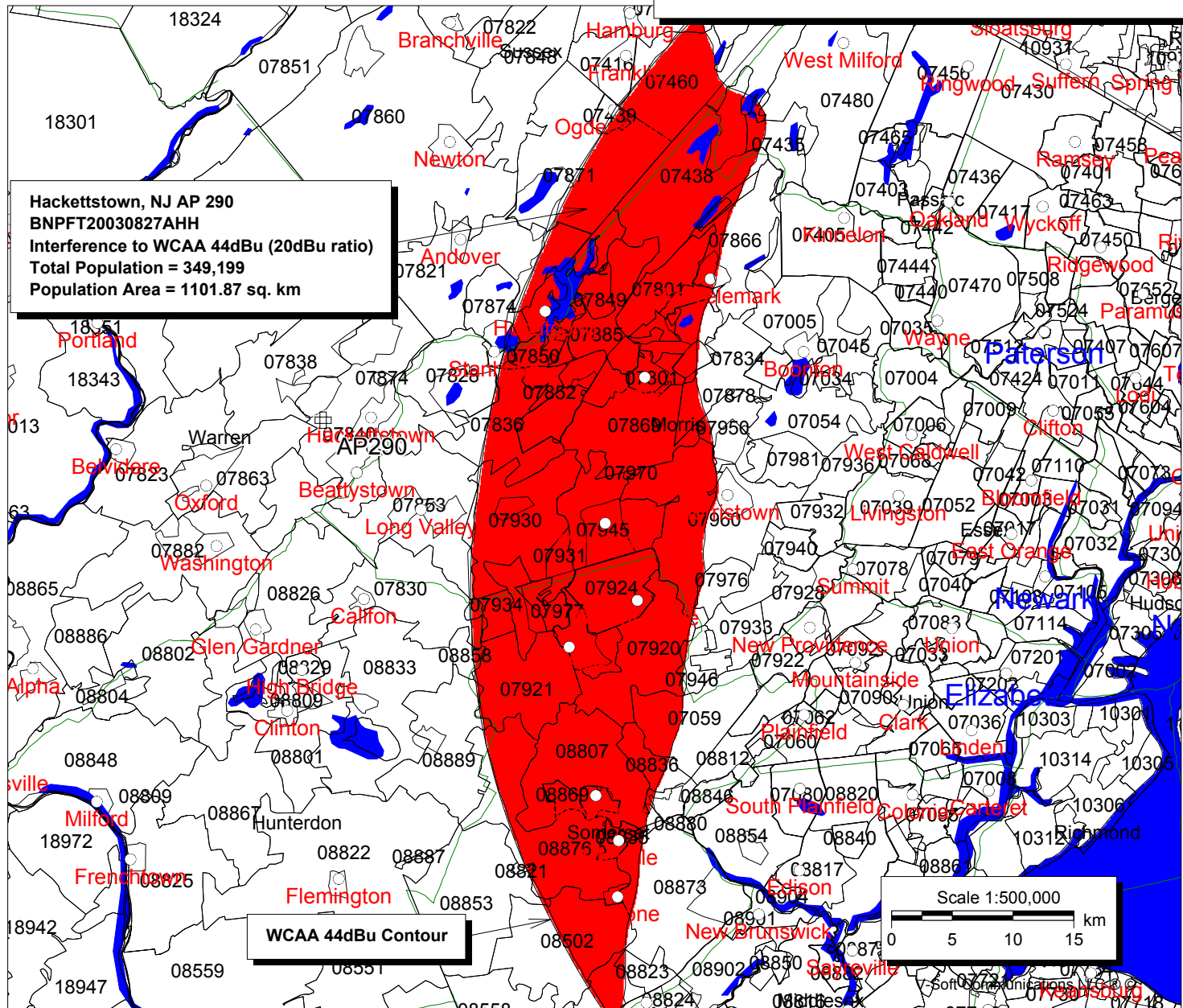


E-3 WCHRFM
BLH20020220AAK
Latitude: 39-42-56 N
Longitude: 074-17-32 W
ERP: 13.00 kW
Channel: 289
Frequency: 105.7 MHz
AMSL Height: 158.0 m
Elevation: 18.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%



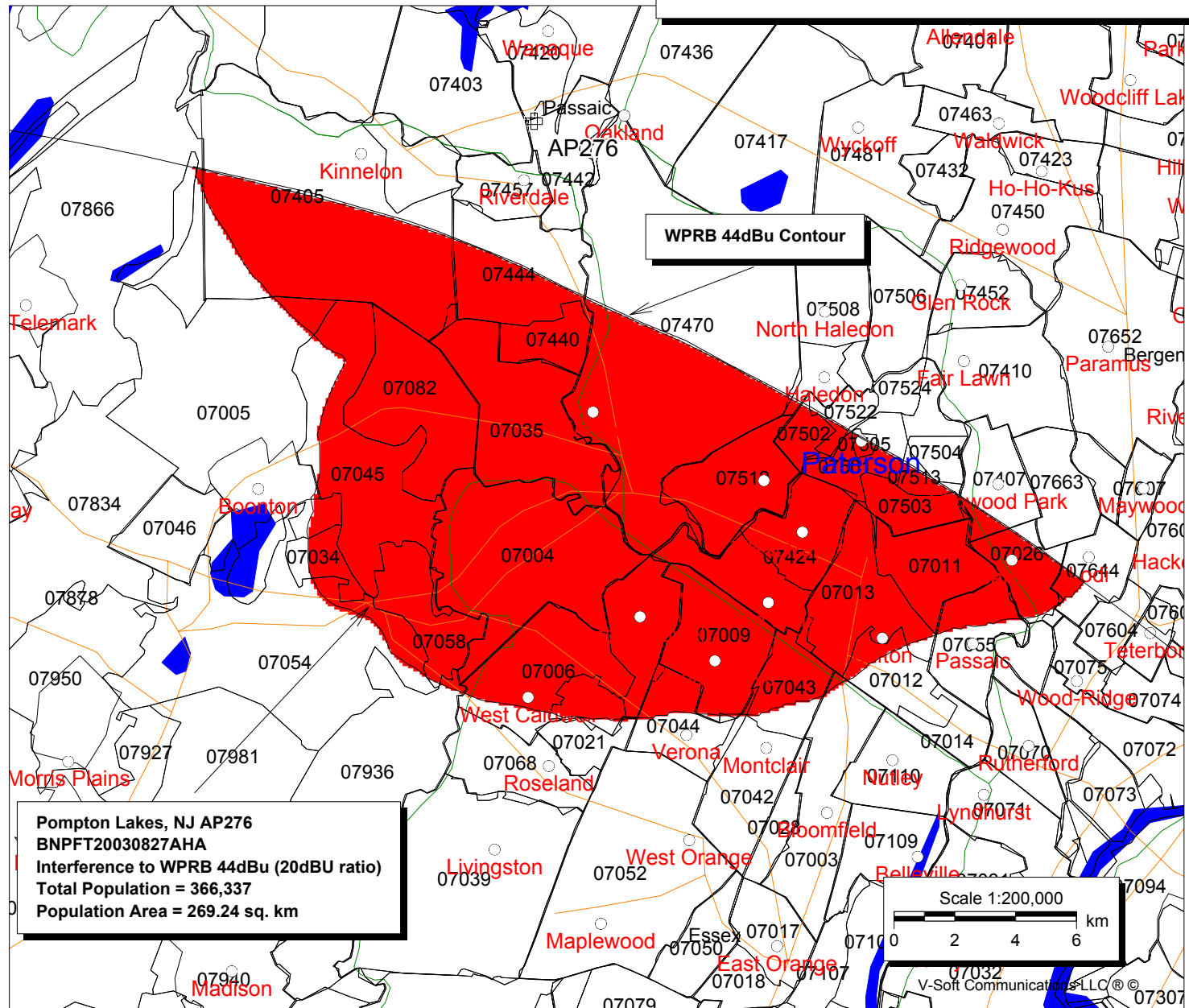
CHARLES M. ANDERSON AND ASSOCIATES

E-4 WCAA
 BLH19970327KA
 Latitude: 40-44-54 N
 Longitude: 073-59-10 W
 ERP: 0.61 kW
 Channel: 290
 Frequency: 105.9 MHz
 AMSL Height: 386.0 m
 Elevation: 15.0 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: FCC Model
 Loc. Variability: 50.0%
 Time Variability: 50.0%



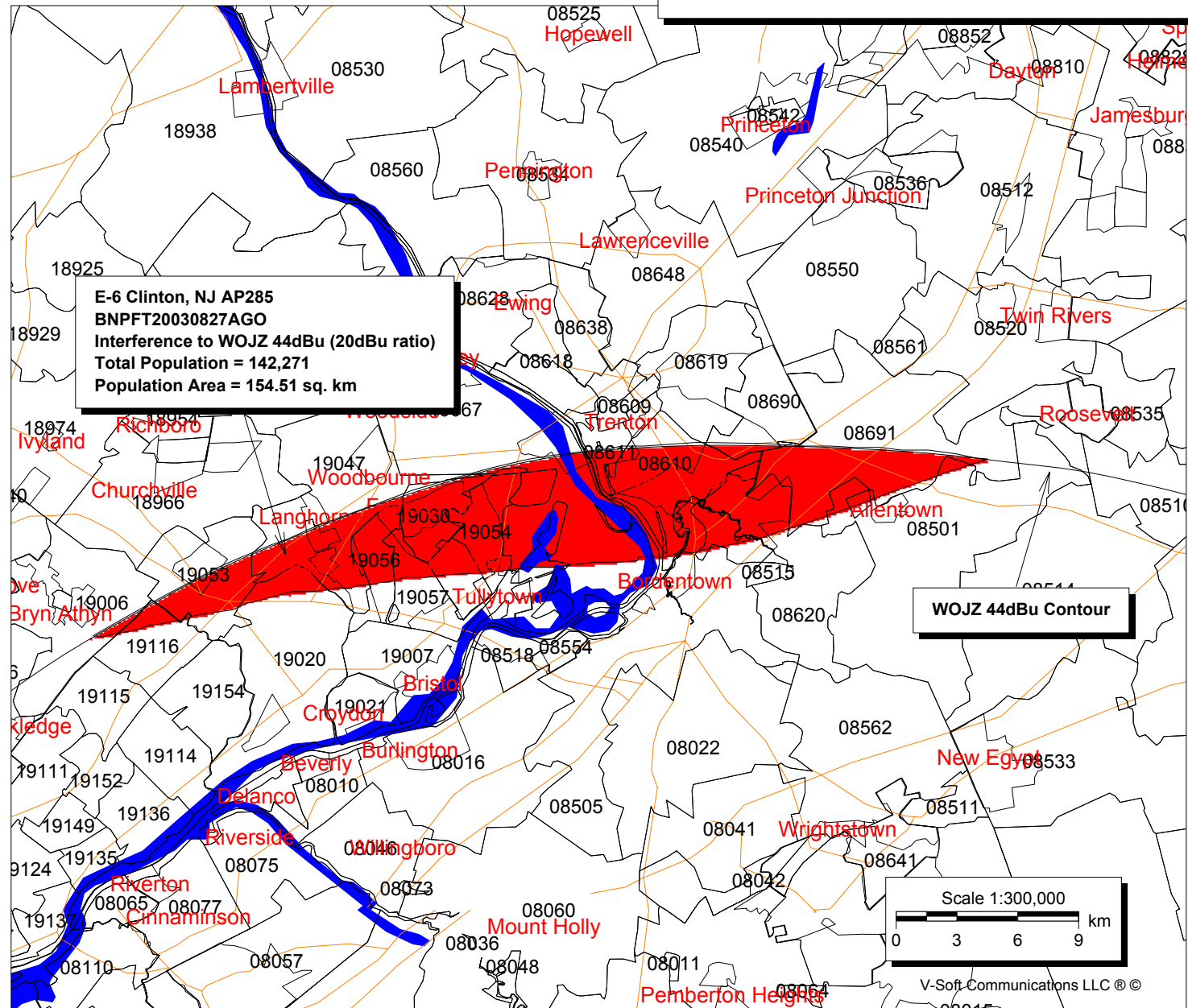
CHARLES M. ANDERSON AND ASSOCIATES

E-5 WPRB
BLH19911028KB
Latitude: 40-17-00 N
Longitude: 074-41-20 W
ERP: 14.00 kW
Channel: 277
Frequency: 103.3 MHz
AMSL Height: 258.0 m
Elevation: 19.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%



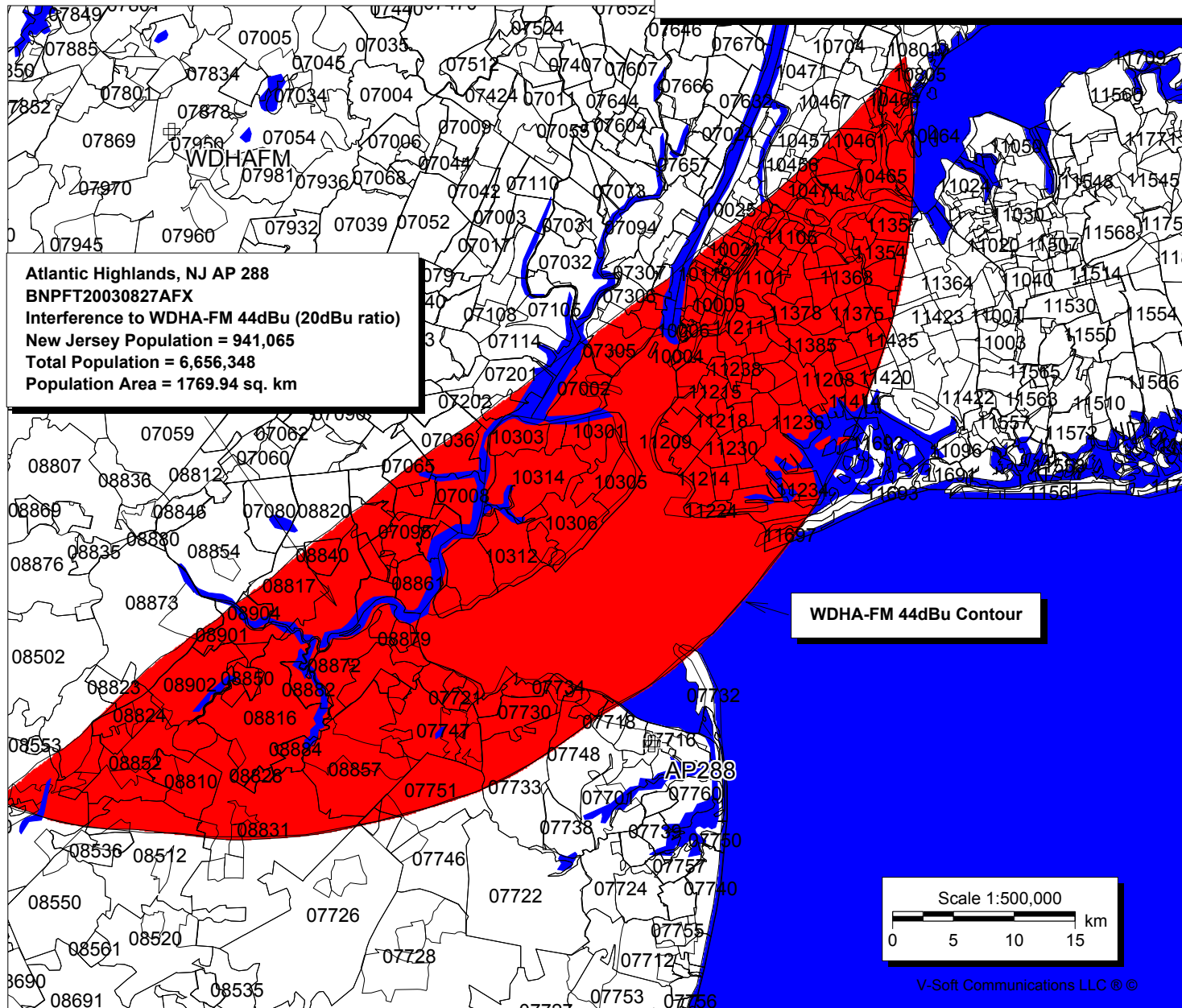
CHARLES M. ANDERSON AND ASSOCIATES

WOJZ
BLH19910726KB
Latitude: 39-32-49 N
Longitude: 074-38-19 W
ERP: 10.00 kW
Channel: 285
Frequency: 104.9 MHz
AMSL Height: 167.0 m
Elevation: 21.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%

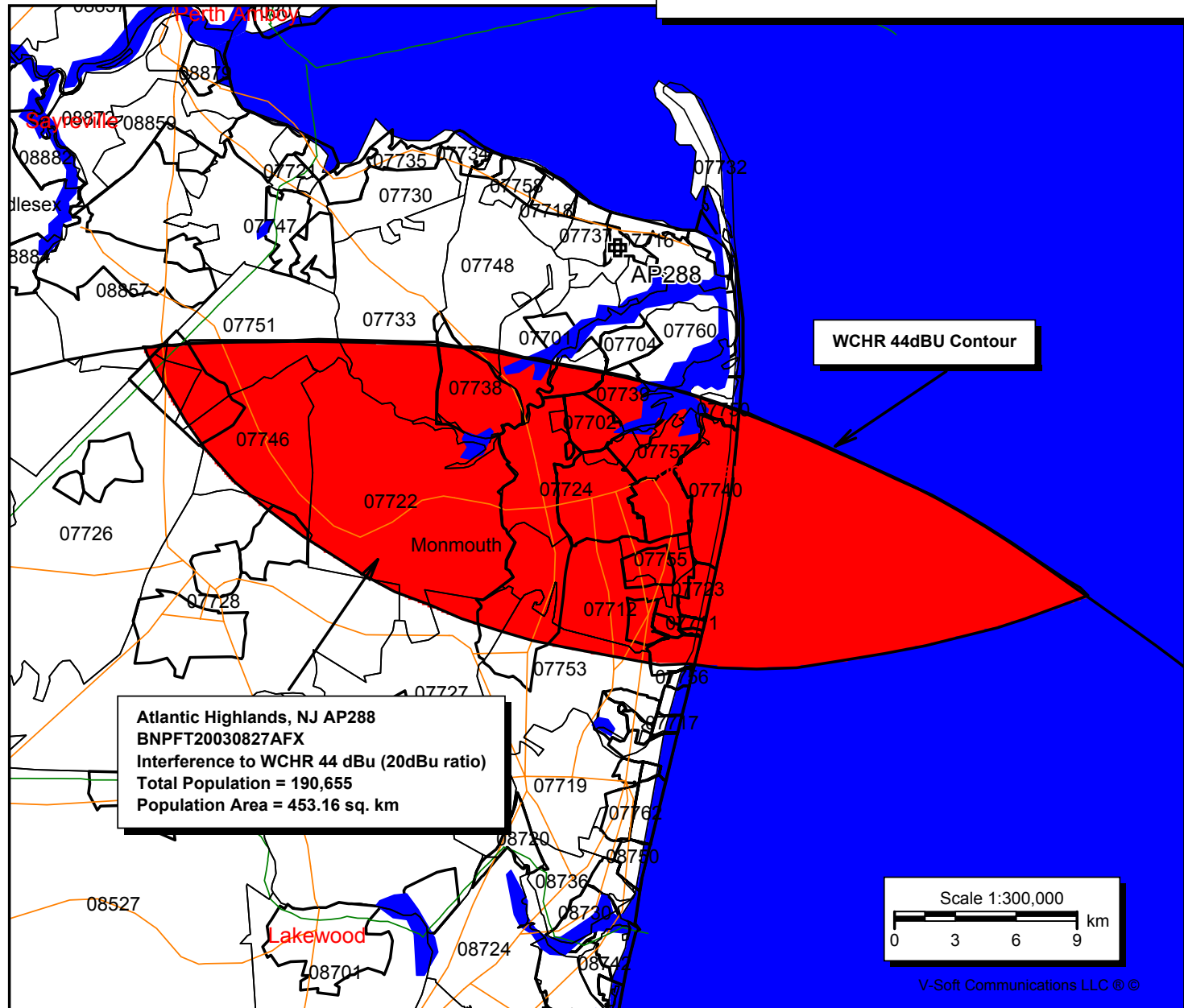


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E-7 WDHA FM
BLH19990726KC
Latitude: 40-51-19 N
Longitude: 074-30-42 W
ERP: 0.98 kW
Channel: 288
Frequency: 105.5 MHz
AMSL Height: 354.0 m
Elevation: 315.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%



E-8 WCHRFM
 BLH20020220AAK
 Latitude: 39-42-56 N
 Longitude: 074-17-32 W
 ERP: 13.00 kW
 Channel: 289
 Frequency: 105.7 MHz
 AMSL Height: 158.0 m
 Elevation: 18.0 m
 Horiz. Pattern: Directional
 Vert. Pattern: No
 Prop Model: FCC Model
 Loc. Variability: 50.0%
 Time Variability: 50.0%




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E-9 WPST
BLH19860827IA
Latitude: 40-14-05 N
Longitude: 074-46-02 W
ERP: 50.00 kW
Channel: 248
Frequency: 97.5 MHz
AMSL Height: 163.0 m
Elevation: 31.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%

West Milford, NJ AP 248
BNPFT20030828ALY
Interference to WPST 44dBu (20dBu ratio)
Total Population = 797,661
New Jersey Population = 648,366
Total Area = 675.4 sq. km

WPST 44dBu Contour

Scale 1:500,000



0 5 10 15 km

AV-Soft Communications LLC ® ©

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WAIV
BLH19900521KC
Latitude: 39-00-33 N
Longitude: 074-52-13 W
ERP: 3.20 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 90.0 m
Elevation: 3.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%

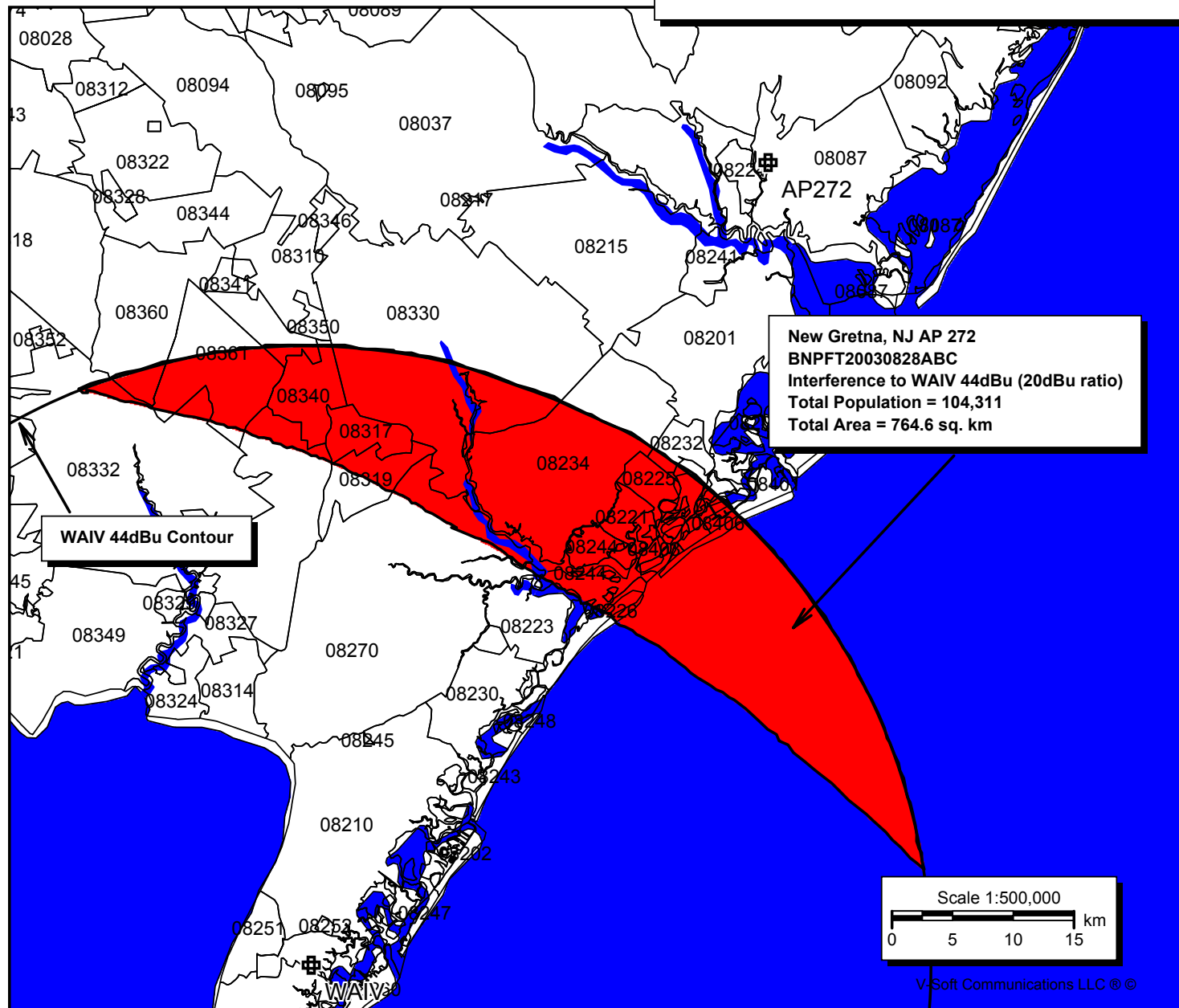


EXHIBIT 12

WDHAFM

INTERFERENCE FROM
TRANSLATOR
APPLICATIONS
ACCEPTED FOR FILING

BLH19990726KC

Latitude: 40-51-19 N

Longitude: 074-30-42 W

ERP: 0.98 kW

Channel: 288

Frequency: 105.5 MHz

AMSL Height: 354.0 m

Elevation: 315.0 m

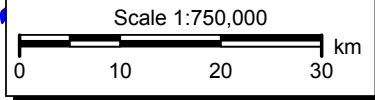
Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: FCC Model

Loc. Variability: 50.0%

Time Variability: 50.0%



WDHA-FM 44 dBu (50,50)

**INTERFERENCE TO WDHA-FM 44 DBU
FROM BNPFT20030827AHH
290D HACKETTSTOWN, NJ**

**POPULATION = 4,822
AREA = 49.7 SQ KM**

**INTERFERENCE TO WDHA-FM 44 DBU FROM
BNPFT-20030827AFX 288D ATLANTIC HIGHLANDS**

**POPULATION = 6,656,348
AREA = 1,769.9 SQ KM**

**INTERFERENCE TO WDHA-FM 44 DBU
FROM BNPFT-20030827AGO
285D CLINTON, NJ**

**POPULATION = 16
AREA = 2.3 SQ KM**

AP290

WDHAFM

AP285

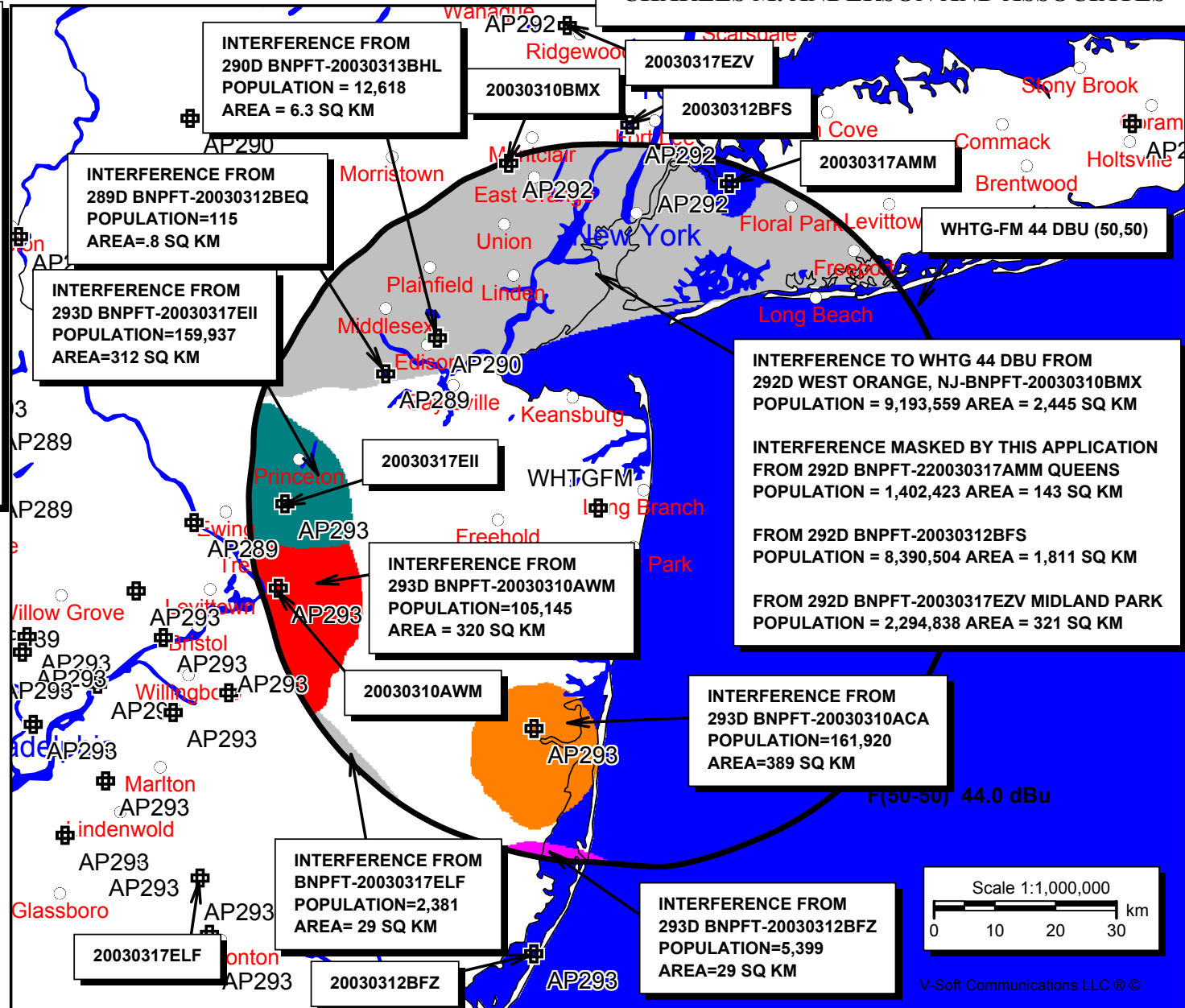
F(50-50) 44.0 dBu

AP288

CHARLES M. ANDERSON AND ASSOCIATES

WHTGFM
 MAXIMUM CLASS A
 ANALYSIS OF
 INTERFERENCE
 TO 44 DBU(50,50)
 FROM PENDING
 TRANSLATOR
 APPLICATIONS

BMPH20020910AAL
 Latitude: 40-16-41 N
 Longitude: 074-04-51 W
 ERP: 2.40 kW
 Channel: 292
 Frequency: 106.3 MHz
 AMSL Height: 181.0 m
 Elevation: 25.6 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: FCC Model
 Loc. Variability: 50.0%
 Time Variability: 50.0%



WKXWFM

BLH20020211AAZ
Latitude: 40-16-58 N
Longitude: 074-41-11 W
ERP: 15.50 kW
Channel: 268
Frequency: 101.5 MHz
AMSL Height: 311.0 m
Elevation: 18.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%

